Practical No. 1

Aim: Create “Hello World” application to display “Hello World’ in the middle of the screen in the red colour with white background.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context=".MainActivity">

   <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Hello World!"
      android:layout_gravity="center"
      android:textColor=”#f00000”
      android:textSize="50dp" />

</LinearLayout>
```

MainActivity.java

```
package com.example.A1;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
   }
}
```

OUTPUT :-

Practical No. 2

Aim: Create sample application with login module. (Check Username and Password), validate it for login screen or alert the user with a Toast.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:background="#b97b8e8f"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/userTXT"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="25dp"
        android:textColor="#0d0707"
        android:hint="Enter your Username"/>

    <EditText
        android:id="@+id/pswdTXT"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:inputType="textPassword"
        android:textSize="25dp"
        android:textColor="#0d0707"
        android:hint="Enter your Password"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/loginBTN"
        android:textSize="25dp"
        android:text="Login"/>
</LinearLayout>
```

activity_home.xml

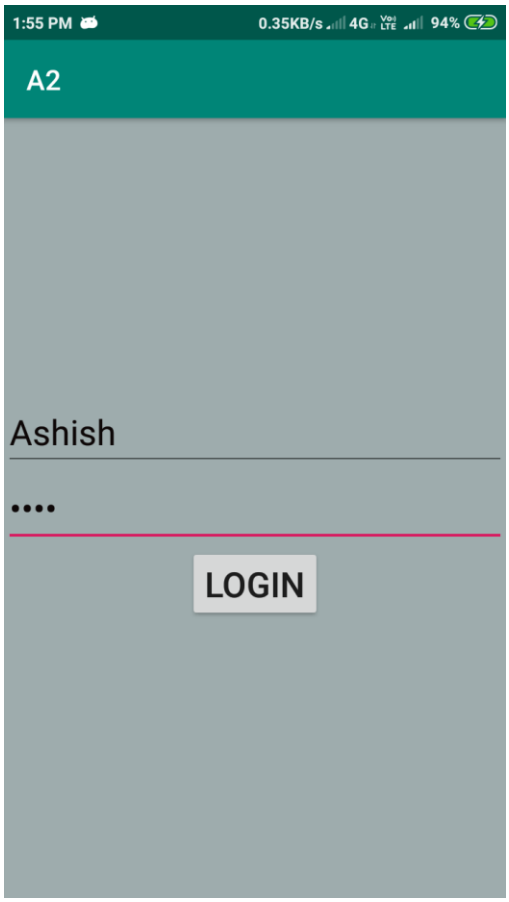
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center"
    android:background="#b97b8e8f"
    tools:context=".HomeActivity">
```

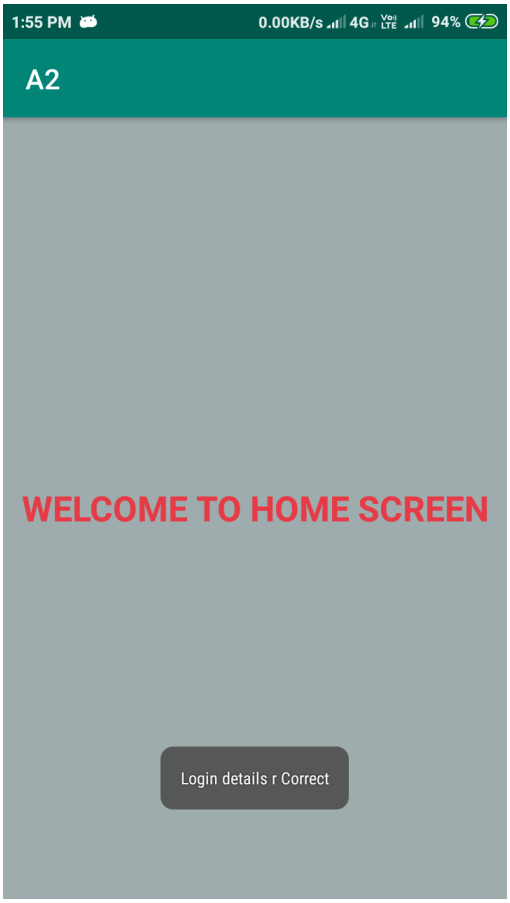
```
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="WELCOME TO HOME SCREEN"
        android:textSize="25dp"
        android:textAlignment="center"
        android:textStyle="bold"
        android:textColor="#e63b46"/>
</LinearLayout>
```

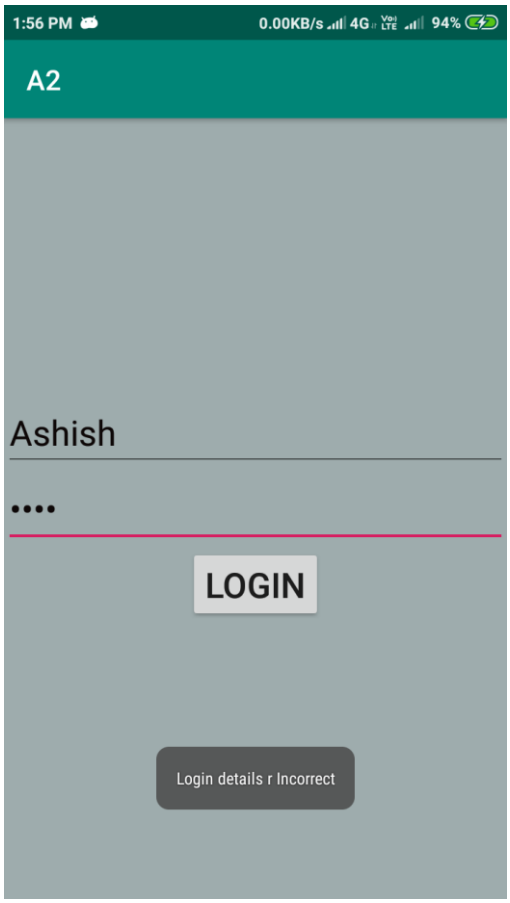
MainActivity.java

```
package com.example.A2;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final EditText username,password;
        Button loginbtn;
        username = findViewById(R.id.userTXT);
        password = findViewById(R.id.pswdTXT);
        loginbtn = findViewById(R.id.loginBTN);
        loginbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                if(username.getText().toString().equals("Ashish") &&
                        password.getText().toString().equals("4321") {
                    Intent intent = new Intent(MainActivity.this, Home.class);
                    startActivity(intent);
                    Toast.makeText(MainActivity.this, "Login details r Correct",
                            Toast.LENGTH_LONG).show();
                }
                else {
                    Toast.makeText(MainActivity.this, "Login details r Incorrect",
                            Toast.LENGTH_LONG).show();
                }
            }
        });
    }
}
```

OUTPUT :-


1:55 PM
0.35KB/s 4G 94%
A2
Ashish
••••
LOGIN


1:55 PM
0.00KB/s 4G 94%
A2
WELCOME TO HOME SCREEN
Login details r Correct


1:56 PM
0.00KB/s 4G 94%
A2
Ashish
••••
LOGIN
Login details r Incorrect

Practical No. 3

Aim: Create and validate a login application using Username as Email ID else login button must remain disabled.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:gravity="center"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context=".MainActivity">
   <TextView
      android:id="@+id/LBLuser"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text=" USERNAME "
      android:textSize="25dp"
      android:layout_alignBaseline="@+id/EDTuser"/>
   <EditText
      android:id="@+id/EDTuser"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_toRightOf="@+id/LBLuser"
      android:textSize="20dp"
      android:hint="Enter ur email address"/>
   <TextView
      android:id="@+id/LBLpwd"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_alignParentStart="true"
      android:layout_below="@+id/LBLuser"
      android:textSize="25dp"
      android:layout_alignBaseline="@+id/EDTpwd"
      android:text=" PASSWORD "
      android:layout_alignParentLeft="true" />
   <EditText
      android:id="@+id/EDTpwd"
   android:layout_width="wrap_content"
   android:layout_height="wrap_content"
   android:layout_below="@+id/EDTuser"
   android:textSize="20dp"
   android:layout_toEndOf="@+id/LBLuser"
   android:ems="8"
   android:inputType="numberPassword"
      android:layout_toRightOf="@+id/LBLuser" />
   <Button
      android:id="@+id/LoginBTN"
      android:layout_width="wrap_content"
```

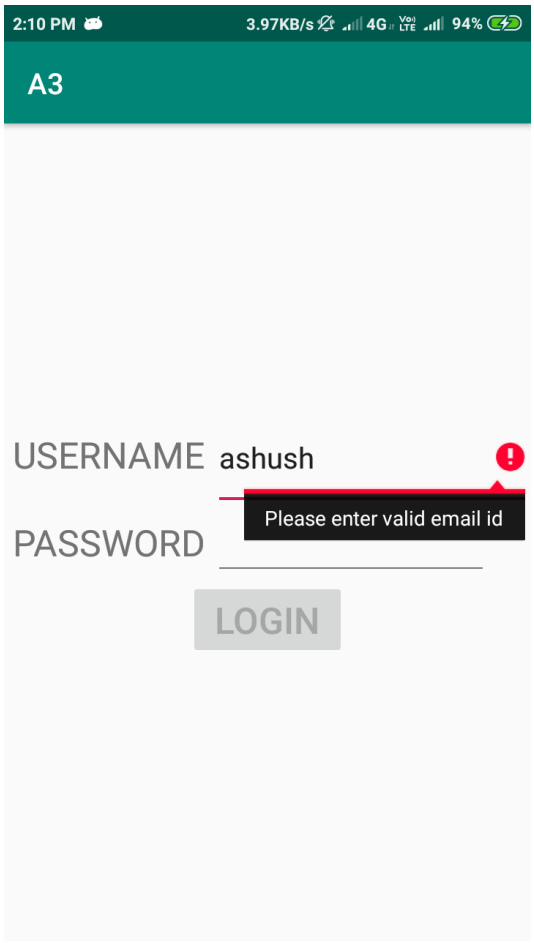
```
        android:layout_height="wrap_content"
        android:layout_below="@+id/EDTpwd"
        android:textSize="25dp"
        android:layout_centerHorizontal="true"
        android:enabled="false"
        android:text=" LOGIN " />
</RelativeLayout>
```

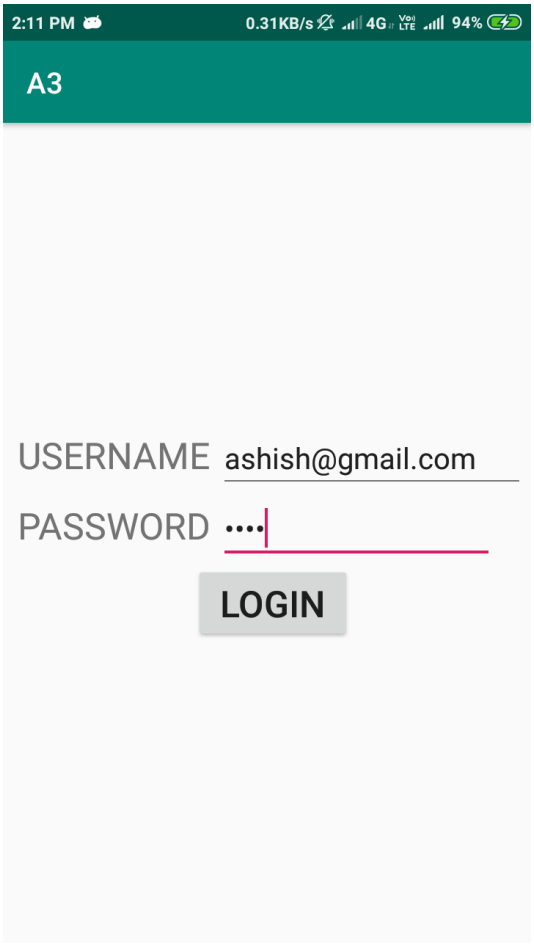
MainActivity.java

```
package com.example.A3;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.Editable;
import android.text.TextWatcher;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
public class MainActivity extends AppCompatActivity {
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      final EditText userid,pswd;
      final Button login;
      userid = findViewById(R.id.EDTuser);
      pswd = findViewById(R.id.EDTpwd);
      login = findViewById(R.id.LoginBTN);
      userid.addTextChangedListener(new TextWatcher() {
         @Override
         public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {}
         @Override
         public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {}
         @Override
         public void afterTextChanged(Editable editable) {
            Pattern pattern = Pattern.compile("[a-zA-z0-9._-]+@[a-z]+\\.[a-z]+");
            Matcher matcher = pattern.matcher(userid.getText().toString().trim());
            if(matcher.matches())
            {
               login.setEnabled(true);
            }
            else {
               userid.setError("Please enter valid email id");
               login.setEnabled(false);
            }
```

```
        }
    });
    login.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            if(userid.getText().toString().equals("ashish@gmail.com") &&
pswd.getText().toString().equals("4321"))
            {
                Toast.makeText(MainActivity.this, "Login Credentials r Correct",
                        Toast.LENGTH_LONG).show();
            }
            else {
                Toast.makeText(MainActivity.this, "Login Credentials r Incorrect",
                        Toast.LENGTH_LONG).show();
            }
        }
    });
  }
}
```

OUTPUT :-


2:10 PM
3.97KB/s
94%
A3
USERNAME
ashush
Please enter valid email id
PASSWORD
LOGIN


2:11 PM
0.31KB/s
94%
A3
USERNAME
ashish@gmail.com
PASSWORD
LOGIN

Practical No. 4

Aim: Create and Login application and open a browser with any one search engine.

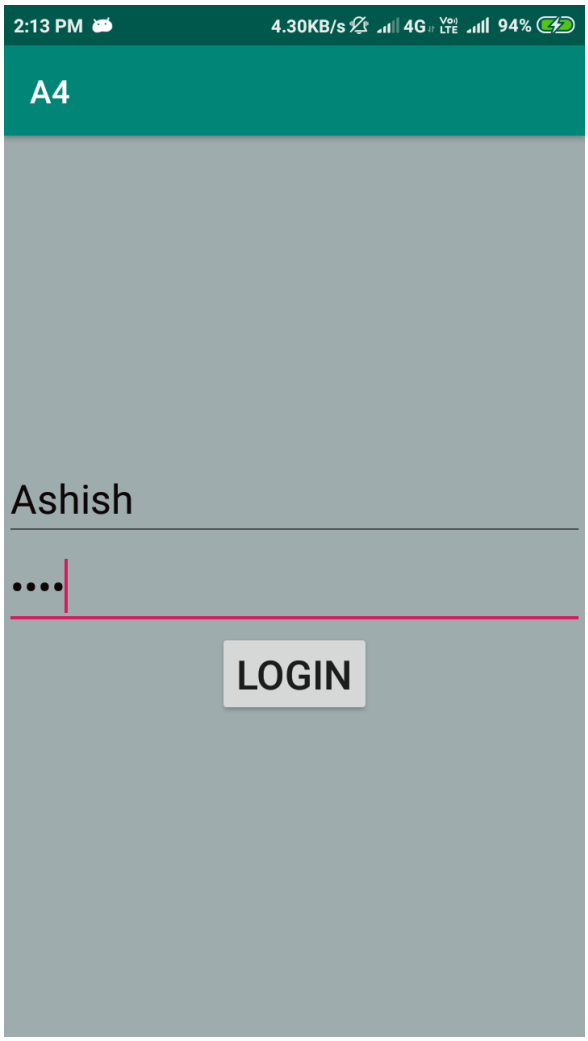
activity_main.xml

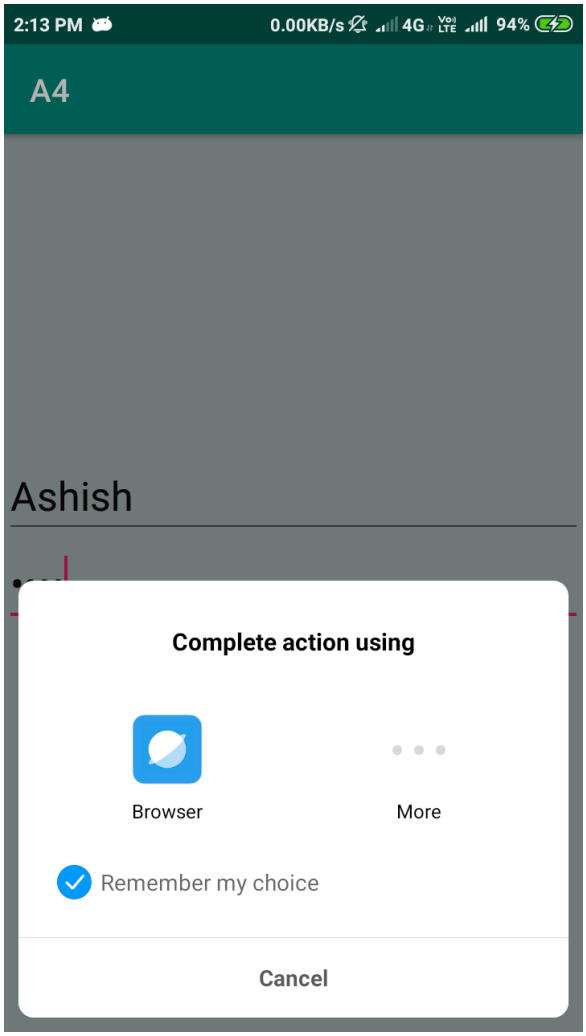
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:background="#b97b8e8f"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/userTXT"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="25dp"
        android:textColor="#0d0707"
        android:hint="Enter your Username"/>

    <EditText
        android:id="@+id/pswdTXT"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:inputType="textPassword"
        android:textSize="25dp"
        android:textColor="#0d0707"
        android:hint="Enter your Password"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/loginBTN"
        android:textSize="25dp"
        android:text="Login"/>

</LinearLayout>
```

MainActivity.java

```
package com.example.A4;

import android.content.Intent; import android.support.v7.app.AppCompatActivity; import
android.os.Bundle; import android.view.View; import android.widget.Button; import
android.widget.EditText; import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      final EditText username,password;
      Button loginbtn;

      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);

      username = findViewById(R.id.userTXT);
      password = findViewById(R.id.pswdTXT);
      loginbtn = findViewById(R.id.loginBTN);

      loginbtn.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View view) {
            if(username.getText().toString().equals("Ashish") &&
password.getText().toString().equals("4321"))
         {
            Intent i = new Intent(Intent.ACTION_WEB_SEARCH);
            startActivity(i);
         }              else {
            Toast.makeText(MainActivity.this, "Login Credentials Incorrect",
                  Toast.LENGTH_LONG).show();
         }
         }
      });
   }
}
```

OUTPUT :-


2:13 PM
4.30KB/s
4G
94%
A4
Ashish
LOGIN


2:13 PM
0.00KB/s
4G
94%
A4
Ashish
Complete action using
Browser
More
Remember my choice
Cancel

Practical No. 5

Aim: Create an application to display “Hello World” string the number of times user inputs a numeric value.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Enter the number of times the text to be displayed"
        android:id="@+id/TVnum"
        android:textSize="20dp"/>
    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/EDnum"
        android:textSize="20dp"
        android:inputType="number"/>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/TVdsply"
        android:textSize="20dp"
        android:inputType="textMultiLine"
        android:scrollbars="vertical" />

</LinearLayout>
```

MainActivity.java

```
package com.example.A5;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.Editable;
import android.text.TextWatcher;
import android.text.method.ScrollingMovementMethod;
import android.widget.EditText;
import android.widget.TextView;
```

```
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        final EditText num;
        final TextView dsply;
        num=findViewById(R.id.EDnum);
        dsply=findViewById(R.id.TVdsply);
        dsply.setMovementMethod(new ScrollingMovementMethod());

        num.addTextChangedListener(new TextWatcher() {
            @Override
            public void beforeTextChanged(CharSequence charSequence, int i, int i1, int i2) {}
            @Override
            public void onTextChanged(CharSequence charSequence, int i, int i1, int i2) {}
            @Override
            public void afterTextChanged(Editable editable) {
                dsply.setText("");
                int i;
                if(num.getText().toString().trim().equals(""))
                    i=0;
                else
                    i=Integer.parseInt(num.getText().toString().trim());
                for(int j=0; j<i; j++)
                {
                    dsply.append("Hello World\n");
                }
            }
        });
    }
}
```

OUTPUT for Practical No. 5

Practical No. 6

Aim: Create Spinner with strings from resource folder. On changing spinner value, change image.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:layout_width="match_parent"
android:layout_height="match_parent"     tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginStart="12dp"
      android:layout_marginTop="45dp"
      android:text="Select Image Name"
      android:textSize="20dp" />

   <Spinner
      android:id="@+id/spinner"
      android:layout_width="172dp"
      android:layout_height="wrap_content"
      android:layout_alignParentEnd="true"
      android:layout_alignTop="@+id/textView"
      android:layout_marginEnd="15dp" />

   <ImageView
      android:id="@+id/imageView"
      android:layout_width="322dp"
      android:layout_height="303dp"
      android:layout_alignParentBottom="true"
      android:layout_alignParentStart="true"
      android:layout_marginBottom="23dp"
      android:layout_marginStart="31dp"
      android:src="@drawable/ic_launcher_background" />

</RelativeLayout>
```

String.xml

```
<resources>
   <string name="app_name">A6</string>
   <array name="spinner_array">
      <item>C++</item>
      <item>Java</item>
```

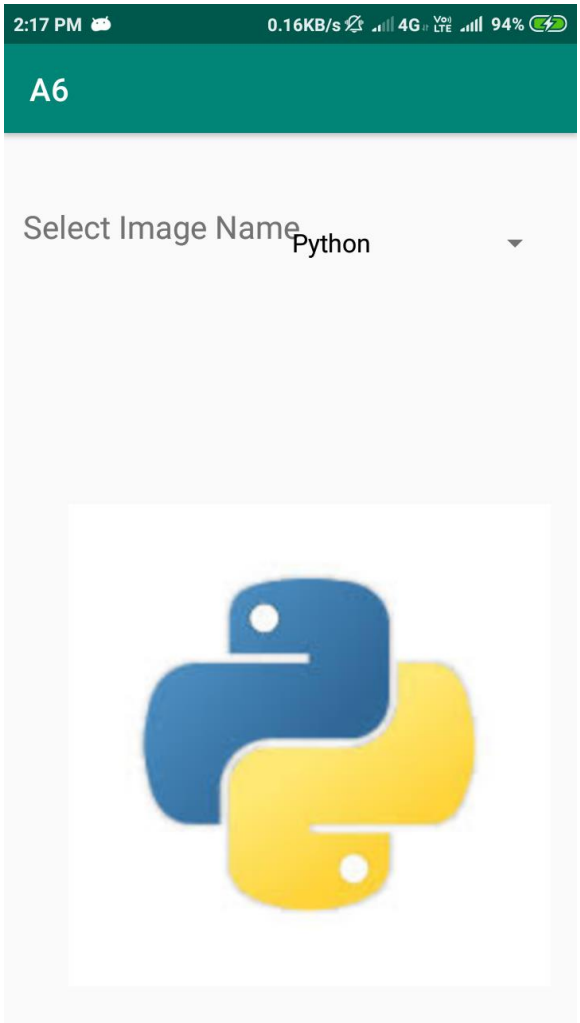
```
        <item>JavaScript</item>
        <item>Python</item>
        <item>Android</item>
    </array>
</resources>
```

MainActivity.java

```
package com.example.A6;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.Spinner;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    Spinner spinner;
    ImageView imageView;
    ArrayAdapter arrayAdapter;
    @Override    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        spinner = findViewById(R.id.spinner);
        imageView = findViewById(R.id.imageView);
        arrayAdapter =
ArrayAdapter.createFromResource(this,R.array.spinner_array,R.layout.support_simple_spin
ner_dropdown_item);
arrayAdapter.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item
);
        spinner.setAdapter(arrayAdapter);
        spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
 @Override
   public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
              switch(i) {    case 0 : imageView.setImageResource(R.drawable.cplus);break;
                 case 1 : imageView.setImageResource(R.drawable.java);break;
                 case 2 : imageView.setImageResource(R.drawable.jscript);break;
                 case 3 : imageView.setImageResource(R.drawable.python);break;
                 case 4 : imageView.setImageResource(R.drawable.android);break;
                 default: Toast.makeText(MainActivity.this, "Invalid Choice",
                       Toast.LENGTH_SHORT).show();
              }
           }
           @Override          public void onNothingSelected(AdapterView<?> adapterView) { }
        });
    }
}
```

OUTPUT :-


2:17 PM
0.00KB/s
4G
94%
A6
Select Image Name
JavaScript
JS


2:17 PM
0.16KB/s
4G
94%
A6
Select Image Name
Python

Practical No. 7

Aim: Create an application to change screen colour as per the user choice from menu.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:id="@+id/mainactivity"
   tools:context=".MainActivity"
   android:orientation="horizontal">

</LinearLayout>
```

menu.xml

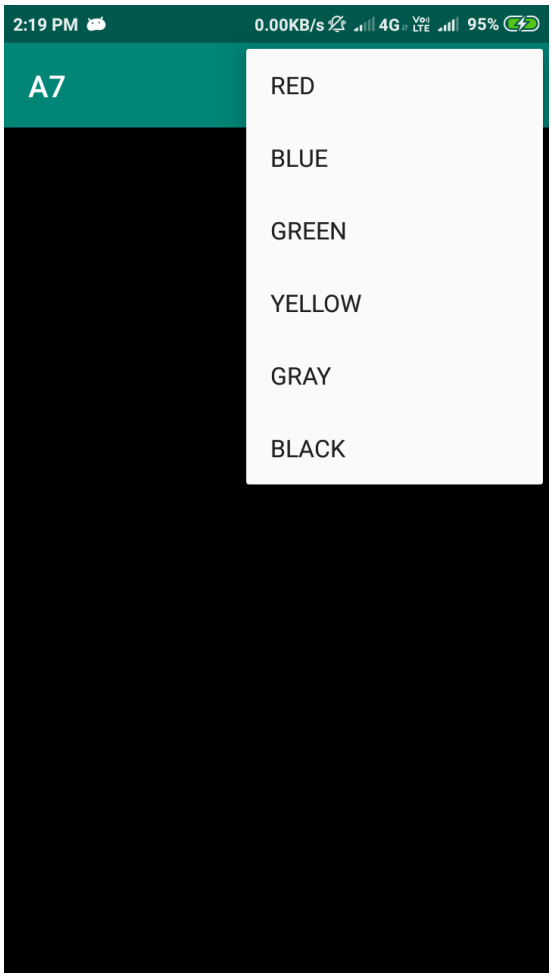
```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:tools="http://schemas.android.com/tools"
   xmlns:android="http://schemas.android.com/apk/res/android">

   <item
      android:id="@+id/colorRed"
      android:title="RED" />
   <item android:id="@+id/colorBlue"
      android:title="BLUE"/>
   <item android:id="@+id/colorGreen"
      android:title="GREEN"/>
   <item android:id="@+id/colorYellow"
      android:title="YELLOW"/>
   <item android:id="@+id/colorGray"
      android:title="GRAY"/>
   <item android:id="@+id/colorBlack"
      android:title="BLACK"/>

</menu>
```

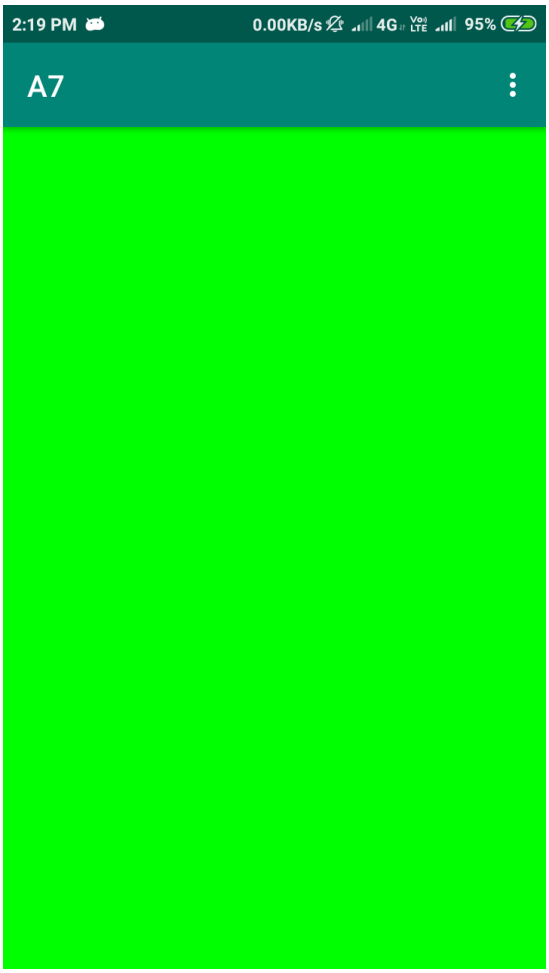
MainActivity.java

```
package com.example.A7;


import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle; import android.view.Menu;
```

```
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;

public class MainActivity extends AppCompatActivity {

    View view;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        view = findViewById(R.id.mainactivity);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        MenuInflater menuInflater = getMenuInflater();
        menuInflater.inflate(R.menu.menu,menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        int id = item.getItemId();
        switch (id)
    {
        case R.id.colorRed    :view.setBackgroundColor(Color.RED);
        return true;
        case R.id.colorBlue   :view.setBackgroundColor(Color.BLUE);
        return true;
        case R.id.colorGreen  :view.setBackgroundColor(Color.GREEN);
        return true;
        case R.id.colorYellow :view.setBackgroundColor(Color.YELLOW);
        return true;
        case R.id.colorGray   :view.setBackgroundColor(Color.GRAY);
        return true;
        case R.id.colorBlack  :view.setBackgroundColor(Color.BLACK);
        return true;
        default: return super.onOptionsItemSelected(item);
    }
    }
}
```

OUTPUT :-


2:19 PM
0.00KB/s
4G
95%
A7
RED
BLUE
GREEN
YELLOW
GRAY
BLACK


2:19 PM
0.00KB/s
4G
95%
A7

Practical No. 8

Aim: Create an application that will have Spinner with the list of animation names. On selecting animation name, that animation should effect on the image displayed below.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginHorizontal="10dp"
        android:text="Select Any Animation"
        android:textAlignment="center"
        android:textSize="30dp" />

    <Spinner
        android:id="@+id/spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginHorizontal="50dp"
        android:layout_alignStart="@+id/textView"
        android:layout_below="@+id/textView" />

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="322dp"
        android:layout_height="303dp"
        android:layout_centerInParent="true"
        android:src="@drawable/download" />

</RelativeLayout>
```

String.xml

```
<resources>
    <string name="app_name">Anim_App8</string>
    <array name="spinner_array">
        <item>---Animation---</item>
        <item>Bounce</item>
        <item>Fade</item>
        <item>Blink</item>
```

```
        <item>Move</item>
        <item>Slide</item>
    </array>
</resources>
```

Anim>> slide.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true">
    <scale
        android:fromXScale="1.0"
        android:fromYScale="1.0"
        android:interpolator="@android:anim/linear_interpolator"
        android:toYScale="0.0"
        android:toXScale="1.0"
        android:duration="1000" />
</set>
```

Anim>> move.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true"
    android:interpolator="@android:anim/linear_interpolator">
    <translate
        android:toXDelta="50%p"
        android:fromXDelta="0%p"
        android:duration="1000" />
</set>
```

Anim>> blink.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true">
    <alpha
        android:toAlpha="1.0"
        android:fromAlpha="0.0"
        android:interpolator="@android:anim/accelerate_interpolator"
    android:duration="1000"/>
</set>
```

Anim>> fade.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true">
```

```
    <alpha
        android:toAlpha="1.0"
        android:fromAlpha="0.0"
        android:interpolator="@android:anim/accelerate_interpolator"
        android:duration="1000"/>
</set>
```

Anim>> bounce.xml

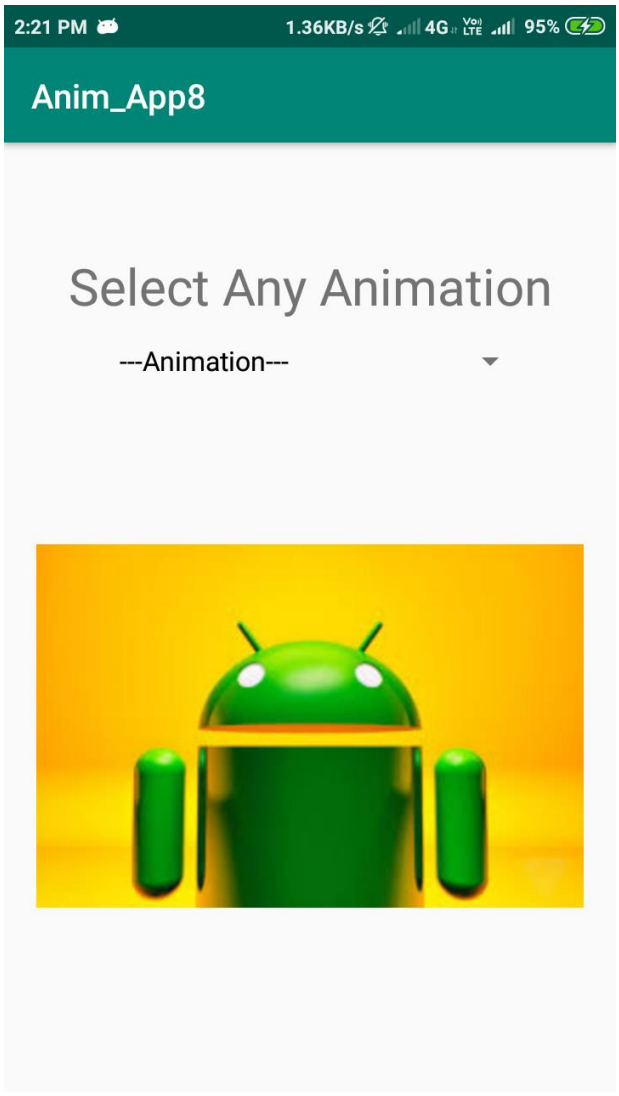
```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true"
    android:interpolator="@android:anim/bounce_interpolator">
    <scale
        android:fromXScale="1.0"
        android:fromYScale="0.0"
        android:toYScale="1.0"
        android:toXScale="1.0"
        android:duration="1000" />
</set>
```

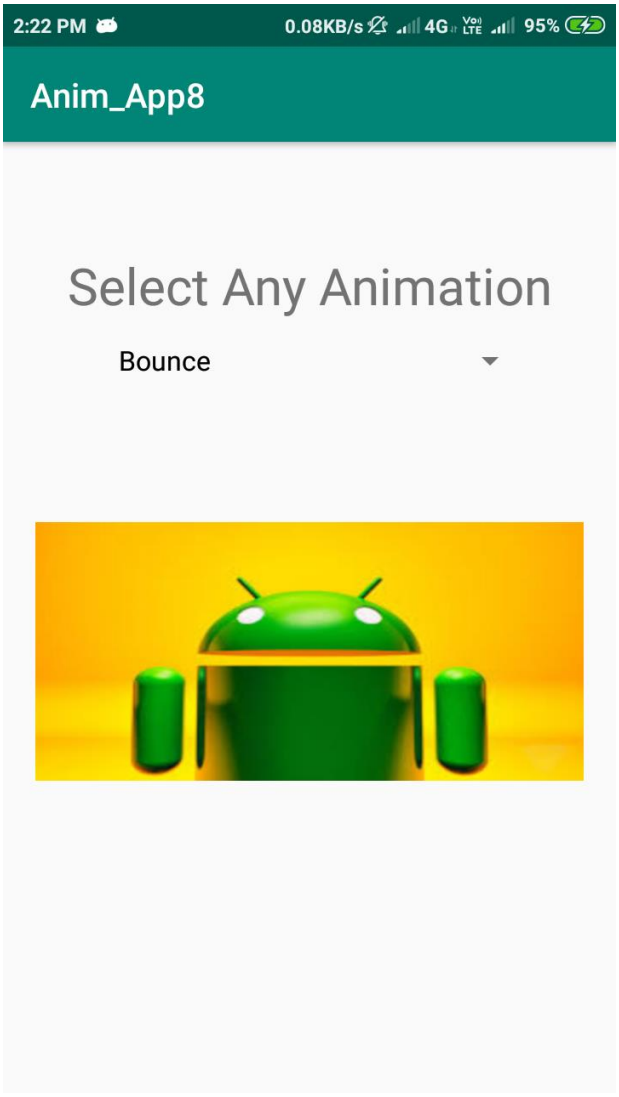
MainActivity.java

```
package com.example.Anim_App8;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.Spinner;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    Spinner spinner;
    ImageView imageView;
    ArrayAdapter arrayAdapter;
    Animation animation;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        spinner = findViewById(R.id.spinner);
        imageView = findViewById(R.id.imageView);
        arrayAdapter =
ArrayAdapter.createFromResource(this,R.array.spinner_array,R.layout.support_simple_spin
ner_dropdown_item);
```

```
arrayAdapter.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item
);
      spinner.setAdapter(arrayAdapter);
      spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
         @Override
         public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
            switch(i)
            {
               case 1 :
animation=AnimationUtils.loadAnimation(MainActivity.this,R.anim.bounce);
                  imageView.startAnimation(animation); break;
               case 2 :
animation=AnimationUtils.loadAnimation(MainActivity.this,R.anim.fade);
                  imageView.startAnimation(animation); break;
               case 3 :
animation=AnimationUtils.loadAnimation(MainActivity.this,R.anim.blink);
                  imageView.startAnimation(animation); break;
               case 4 :
animation=AnimationUtils.loadAnimation(MainActivity.this,R.anim.move);
                  imageView.startAnimation(animation); break;
               case 5 :
animation=AnimationUtils.loadAnimation(MainActivity.this,R.anim.slide);
                  imageView.startAnimation(animation); break;
               default: Toast.makeText(MainActivity.this, "Invalid Choice",
                     Toast.LENGTH_SHORT).show();
            }
         }
         @Override
         public void onNothingSelected(AdapterView<?> adapterView) {
         }
      });
   }
}
```

OUTPUT for Practical No. 8





Practical No. 9

Aim: Create an UI listing the diploma engineering branches. If user selects a branch name, display the number of semesters and subject in each semester.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textAlignment="center"
        android:text="Diploma\nEngineering\nCourse Structure"
        android:textStyle="bold"
        android:textSize="50dp"/>
    <Button
        android:id="@+id/BTNcse"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Computer Science Engg."
        android:textStyle="bold"
        android:textSize="25dp"/>
    <Button
        android:id="@+id/BTNme"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Mechanical Engg."
        android:textStyle="bold"
        android:textSize="25dp"/>
    <Button
        android:id="@+id/BTNee"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
    android:text="Electrical Engg."
    android:textStyle="bold"
    android:textSize="25dp"/>
    <Button
        android:id="@+id/BTNce"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Civil Engg."
        android:textStyle="bold"
```

```
        android:textSize="25dp"/>
</LinearLayout>
```

activity_cse.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    android:layout_margin="30dp"
    tools:context=".cse">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="COMPUTER SCIENCE ENGINEERING"
        android:textAlignment="center"
        android:textSize="40dp"/>
    <Spinner
        android:id="@+id/SPN1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <Spinner
        android:id="@+id/SPN2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <Spinner
        android:id="@+id/SPN3"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"/>
    <Spinner
        android:id="@+id/SPN4"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <Spinner
        android:id="@+id/SPN5"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <Spinner
        android:id="@+id/SPN6"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
</LinearLayout>
```

String.xml

```
<resources>
   <string name="app_name">A9</string>
   <array name="sem1">
      <item>---- FIRST SEMESTER ----</item>
      <item>English Comunnication-1</item>
      <item>Applied Mathematics-1</item>
      <item>Applied Physics-1</item>
      <item>Applied Chemistry-1</item>
      <item>Fundamental of Computer</item>
      <item>Engineering Mechanics</item>
   </array>
   <array name="sem2">
      <item>---- SECOND SEMESTER ----</item>
      <item>English Comunnication-2</item>
      <item>Applied Mathematics-2</item>
      <item>Applied Physics-2</item>
      <item>Applied Chemistry-2</item>
      <item>Workshop Technology</item>
      <item>Engineering Drawing</item>
   </array>
   <array name="CSE_sem3">
      <item>---- THIRD SEMESTER ----</item>
      <item>Computer Architecture</item>
      32
      <item>Programming in C</item>
      <item>Operating System</item>
      <item>Database Management System</item>
      <item>Digital Electronics</item>
   </array>
   <array name="CSE_sem4">
      <item>---- FOURTH SEMESTER ----</item>
      <item>Data Structure in C</item>
      <item>OOPS using C++</item>
      <item>Linux Operating System</item>
      <item>Computer H/W</item>
      <item>Managemnet Information System</item>
   </array>
   <array name="CSE_sem5">
      <item>---- FIFTH SEMESTER ----</item>
      <item>Computer Network</item>
      <item>Internet and Web Technology</item>
      <item>Java Programming</item>
      <item>E-Commerce</item>
      <item>EDP</item>
   </array>
   <array name="CSE_sem6">
      <item>---- SIXTH SEMESTER ----</item>
      <item>Multimedia</item>
      <item>.Net Programming</item>
```

```
        <item>Information Security</item>
        <item>Professional And Bussiness Communication</item>
        <item>High Speed Networks</item>
    </array>
</resources>
```

MainActivity.java

```
package com.example.A9;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        Button btncse, btnme, btnee, btnce;
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        btncse = findViewById(R.id.BTNcse);
        btnee = findViewById(R.id.BTNee);
        btnme = findViewById(R.id.BTNme);
        btnce = findViewById(R.id.BTNce);
        btncse.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, cse.class);
                startActivity(intent);
            }
            }

                    );
// TO WRITE SIMILAR CODES FOR CORRESPONDING BUTTONS
// btnee.setOnClickListener(new View.OnClickListener() {
// @Override
// public void onClick(View view) {
// Intent intent = new Intent(BranchActivity.this, EEActivity.class);
// }
// });
//
// btnme.setOnClickListener(new View.OnClickListener() {
// @Override
// public void onClick(View view) {
// Intent intent = new Intent(BranchActivity.this, MEActivity.class);
// }
// });
//
```

```
// btnce.setOnClickListener(new View.OnClickListener() {
// @Override
// public void onClick(View view) {
// Intent intent = new Intent(BranchActivity.this, CEActivity.class);
// }
// });
    }
}
```

cse.java

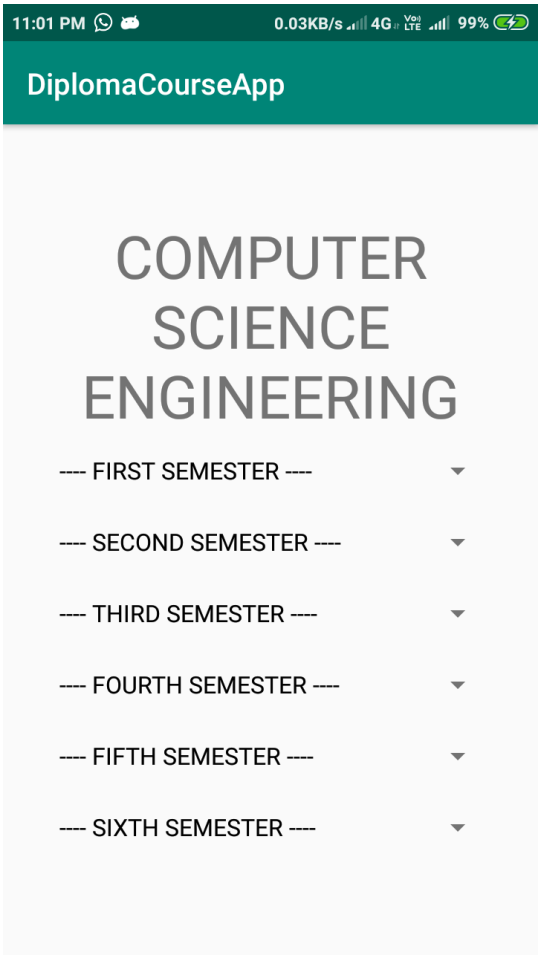
```
package com.example.A9;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
public class cse extends AppCompatActivity {
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      final Spinner spn1,spn2,spn3,spn4, spn5,spn6;
      ArrayAdapter adapter1, adapter2, adapter3, adapter4, adapter5, adapter6;
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_cse);
      spn1 = findViewById(R.id.SPN1);
      spn2 = findViewById(R.id.SPN2);
      spn3 = findViewById(R.id.SPN3);
      spn4 = findViewById(R.id.SPN4);
      spn5 = findViewById(R.id.SPN5);
      spn6 = findViewById(R.id.SPN6);
      adapter1 =
ArrayAdapter.createFromResource(this,R.array.sem1,R.layout.support_simple_spinner_drop
down_item);

adapter1.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
      spn1.setAdapter(adapter1);
      spn1.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
         @Override
         public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
            spn1.setSelection(0);
         }
         @Override
         public void onNothingSelected(AdapterView<?> adapterView) {}
      });
      adapter2 =
ArrayAdapter.createFromResource(this,R.array.sem2,R.layout.support_simple_spinner_drop
down_item);
```

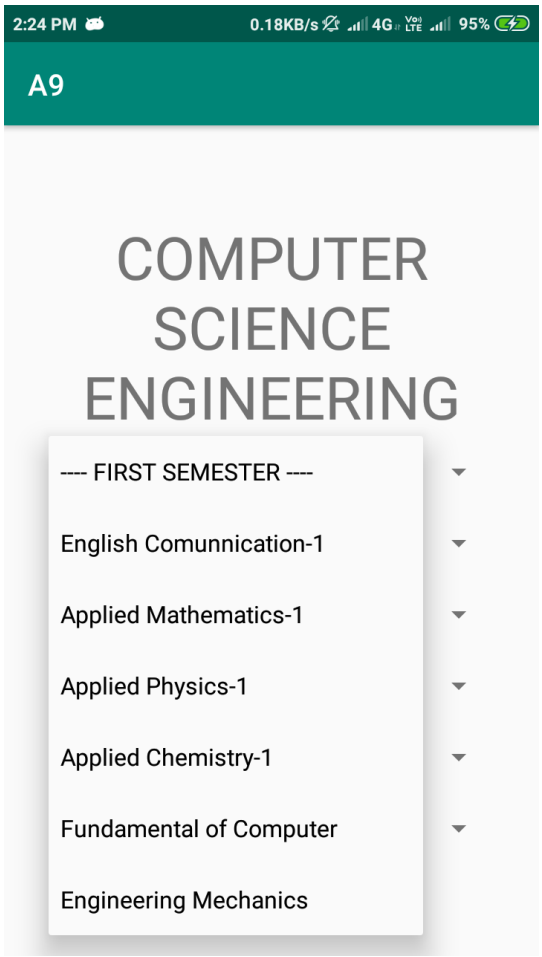
```
adapter2.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
        spn2.setAdapter(adapter2);
        spn2.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                spn2.setSelection(0);
            }
            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {}
        });
        adapter3 =
ArrayAdapter.createFromResource(this,R.array.CSE_sem3,R.layout.support_simple_spinner
_dropdown_item);

adapter3.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
        spn3.setAdapter(adapter3);
        spn3.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                spn3.setSelection(0);
            }
            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {}
        });
        adapter4 =
ArrayAdapter.createFromResource(this,R.array.CSE_sem4,R.layout.support_simple_spinner
_dropdown_item);

adapter4.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
        spn4.setAdapter(adapter4);
        spn4.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                spn4.setSelection(0);
            }
            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {}
        });
        adapter5 =
ArrayAdapter.createFromResource(this,R.array.CSE_sem5,R.layout.support_simple_spinner
_dropdown_item);

adapter5.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
        spn5.setAdapter(adapter5);
        spn5.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                spn5.setSelection(0);
            }
            @Override
```

```
            public void onNothingSelected(AdapterView<?> adapterView) {}
        });
        adapter6 =
ArrayAdapter.createFromResource(this,R.array.CSE_sem6,R.layout.support_simple_spinner
_dropdown_item);

adapter6.setDropDownViewResource(R.layout.support_simple_spinner_dropdown_item);
        spn6.setAdapter(adapter6);
        spn6.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                spn6.setSelection(0);
            }
            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {}
        });
    }
}
```

OUTPUT :-


10:43 PM
0.00KB/s 4G 96%
DiplomaCourseApp
Diploma Engineering Course Structure
COMPUTER SCIENCE ENGG.
MECHANICAL ENGG.
ELECTRICAL ENGG.
CIVIL ENGG.


11:01 PM
0.03KB/s 4G 99%
DiplomaCourseApp
COMPUTER SCIENCE ENGINEERING
---- FIRST SEMESTER ----
---- SECOND SEMESTER ----
---- THIRD SEMESTER ----
---- FOURTH SEMESTER ----
---- FIFTH SEMESTER ----
---- SIXTH SEMESTER ----


2:24 PM
0.18KB/s 4G 95%
A9
COMPUTER SCIENCE ENGINEERING
---- FIRST SEMESTER ----
English Comunnication-1
Applied Mathematics-1
Applied Physics-1
Applied Chemistry-1
Fundamental of Computer
Engineering Mechanics

Practical No. 10

Aim: Create an application that will create database to store Username and Password.

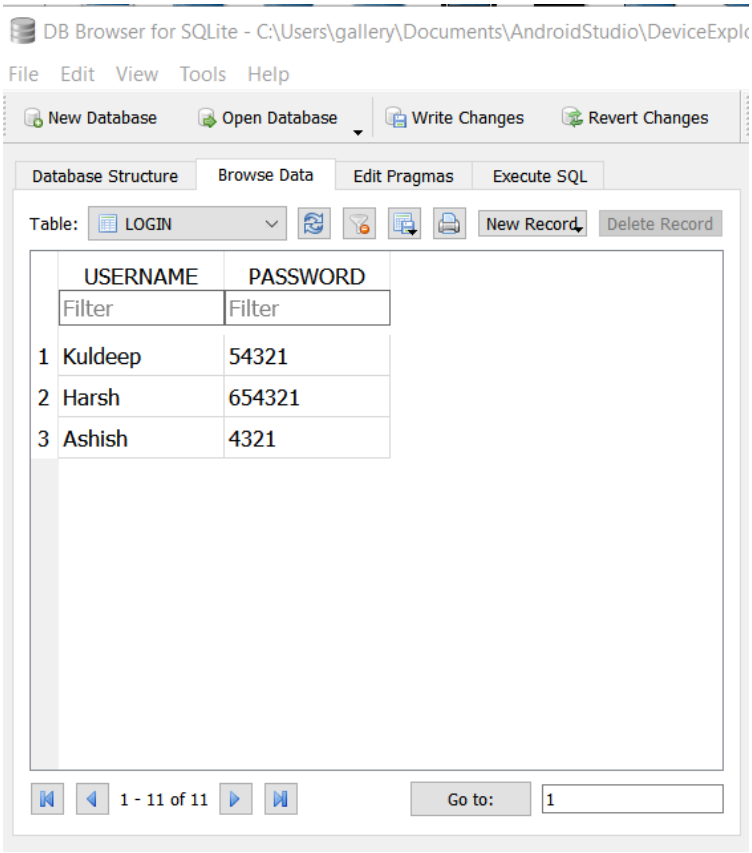
activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   tools:context=".MainActivity">
   <EditText
      android:id="@+id/userTF"
      android:layout_width="288dp"
      android:layout_height="wrap_content"
      android:layout_alignParentTop="true"
      android:layout_centerHorizontal="true"
      android:layout_marginTop="99dp"
      android:hint="Enter Your UserName"
      android:textSize="25dp" />
   <EditText
      android:id="@+id/pwdTF"
      android:layout_width="288dp"
      android:layout_height="wrap_content"
      android:layout_alignParentTop="true"
      android:layout_alignStart="@+id/userTF"
      android:layout_marginTop="165dp"
      android:hint="Enter Your Password"
      android:textSize="23dp"
      android:inputType="textPassword"/>
   <Button
      android:id="@+id/registerBTN"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_alignParentTop="true"
      android:layout_centerHorizontal="true"
      android:layout_marginTop="246dp"
      android:text="REGISTER"
      android:textSize="20dp" />
</RelativeLayout>
```

MainActivity.java

```
package com.example.A10;

import android.database.sqlite.SQLiteDatabase;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
```

```
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import static android.provider.Telephony.Carriers.PASSWORD;
import static java.sql.Types.VARCHAR;

public class MainActivity extends AppCompatActivity {
   EditText username, password;
   Button register;
   SQLiteDatabase sql;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      username = findViewById(R.id.userTF);
      password = findViewById(R.id.pwdTF);
      register = findViewById(R.id.registerBTN);
      sql = openOrCreateDatabase("LOGINDATA",0,null);
      sql.execSQL("CREATE TABLE IF NOT EXISTS LOGIN(USERNAME
VARCHAR(20),PASSWORD VARCHAR(20))");
      register.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View view) {
            String userName = username.getText().toString().trim();
            String passWord = password.getText().toString().trim();
            sql.execSQL("INSERT INTO LOGIN
VALUES('"+userName+"','"+passWord+"')");
            Toast.makeText(MainActivity.this, "Registered Successfully !",
                  Toast.LENGTH_SHORT).show();
         }
      });
   }
}
```



OUTPUT for Practical No.10