CONTENTS

1. LOGIN PAGE

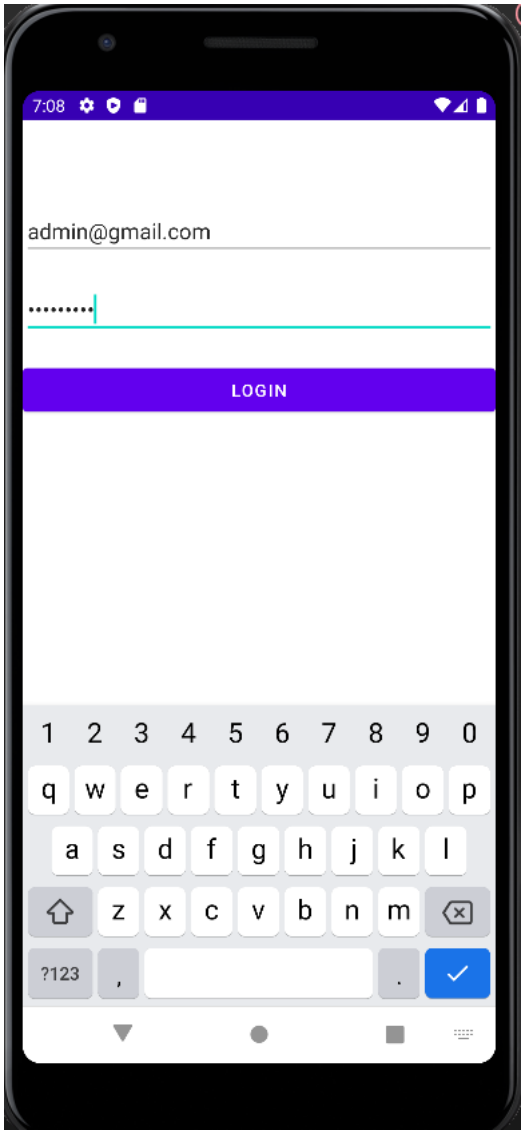
AIM: Design a login form with username and password using linear layout and toast valid credentials

Date :

PROGRAM CODE

MainActivity.Java

```
package com.example.loginapp;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
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 {
    String strEmail,strPassword;
    EditText email,password;
    Button loginbtn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        email = findViewById(R.id.editTextTextEmailAddress);
        password = findViewById(R.id.editTextTextPassword);
        loginbtn = findViewById(R.id.btn);
```


7:08
admin@gmail.com
LOGIN
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123

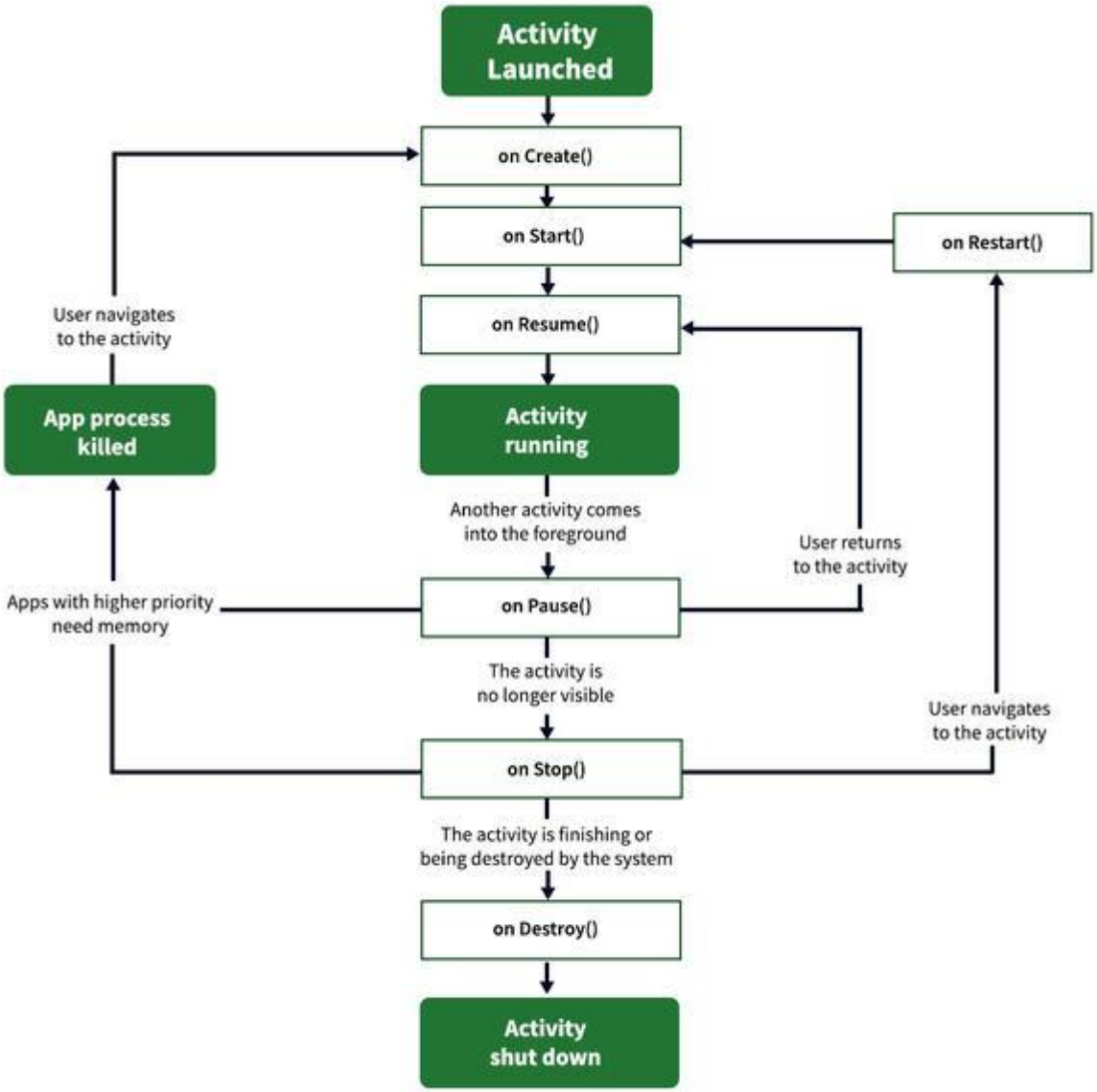
```
loginbtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {

            strEmail=email.getText().toString();
            strPassword=password.getText().toString();

            if(strEmail.equals("admin@gmail.com") && strPassword.equals("admin123") )
            {
                startActivity(new Intent(MainActivity.this,HomePage.class));

                Toast.makeText(MainActivity.this, "Login Success",
Toast.LENGTH_SHORT).show();
            }
            else
            {
                Toast.makeText(MainActivity.this, "Login Failed",
Toast.LENGTH_SHORT).show();
            }

        }
      });

   }
}
```

ActivityMain.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"
    android:orientation="vertical">
    <EditText
        android:id="@+id/editTextTextEmailAddress"
        android:layout_width="match_parent"
        android:layout_marginTop="70dp"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textEmailAddress"
        android:hint="enter email"/>

    <EditText
        android:layout_marginTop="20dp"
        android:id="@+id/editTextTextPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPassword"
        android:hint="enter password"/>

    <Button
        android:id="@+id/btn"
        android:text="Login"
        android:layout_marginTop="20dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

</LinearLayout>
```

RESULT: The program is executed and output is verified



Activity Lifecycle in Android

2. ACTIVITY LIFE CYCLE

AIM: Write a program to demonstrate activity lifecycle.

Date :

PROGRAM CODE

MainActivity.Java

```
import android.app.Activity;
import android.os.Bundle;
import android.util.Log;
public class MainActivity extends Activity {
 @Override
protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);
                 Log.d("lifecycle","onCreate invoked");
}
@Override
protected void onStart() {
                 super.onStart();
                 Log.d("lifecycle","onStart invoked");
}
@Override
```

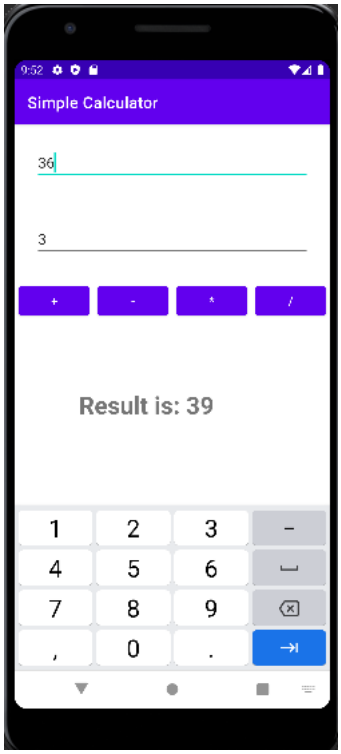
```
protected void onResume() {
                super.onResume();
                Log.d("lifecycle","onResume invoked");
            }
@Override
protected void onPause() {
super.onPause();
Log.d("lifecycle","onPause invoked");
}
@Override
protected void onStop() {
                super.onStop();
                Log.d("lifecycle","onStop invoked");
}
@Override
protected void onRestart() {
                super.onRestart();
                Log.d("lifecycle","onRestart invoked");
}
@Override
protected void onDestroy() {
                super.onDestroy();
                Log.d("lifecycle","onDestroy invoked");
}
}
```

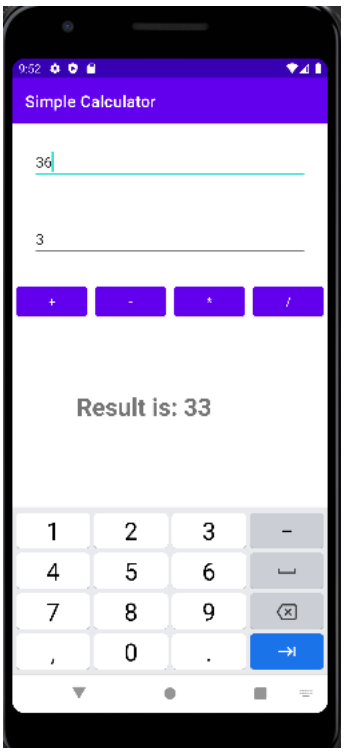
ActivityMain.xml

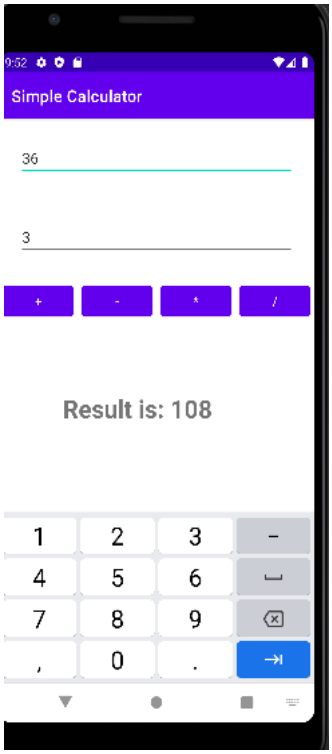
```
<?xml version="1.0" encoding="utf-8"?>

<android.support.constraint.ConstraintLayout 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="example.javatpoint.com.activitylifecycle.MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>
```

RESULT: The program is executed and output is verified

OUTPUT:


Simple Calculator
36
3
+ - * /
Result is: 39
1 2 3 -
4 5 6
7 8 9
, 0 .


Simple Calculator
36
3
+ - * /
Result is: 33
1 2 3 -
4 5 6
7 8 9
, 0 .


Simple Calculator
36
3
+ - * /
Result is: 108
1 2 3 -
4 5 6
7 8 9
, 0 .


Simple Calculator
36
3
+ - * /
Result is: 12
1 2 3 -
4 5 6
7 8 9
, 0 .

3. SIMPLE CALCULATOR

AIM: Implement basic arithmetic operation of a simple calculator

Date:

PROGRAM CODE

MainActivity.Java

```
package com.example.simplecalculator;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.os.TestLooperManager;
import android.text.Editable;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import java.net.Inet4Address;

public class MainActivity extends AppCompatActivity {
    String result;
    int firstNum;
    int secondNum;
    EditText num1,num2;
    TextView resultTx;
    Button btnAdd,btnSub,btnMul,btnDiv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
 setContentView(R.layout.activity_main);
    num1 = findViewById(R.id.etnum1);
    num2 = findViewById(R.id.etnum2);
    resultTx = findViewById(R.id.txtResult);
    btnAdd = findViewById(R.id.btnAdd);
    btnSub = findViewById(R.id.btnMinus);
    btnMul = findViewById(R.id.btnMul);
    btnDiv = findViewById(R.id.btnDiv);
    btnAdd.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view)
        {
            numFinder();
            result = String.valueOf(firstNum+secondNum);
            resultTx.setText("Result is: " +result);
        }
    });
    btnSub.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view)
            {
                numFinder();
                result = String.valueOf(firstNum-secondNum);


                resultTx.setText("Result is: " +result);
            }
    });
```

```
    btnMul.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view)
            {
                numFinder();
                result = String.valueOf(firstNum*secondNum);


                resultTx.setText("Result is: " +result);
            }
    });



    btnDiv.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view)
            {
                numFinder();
                result = String.valueOf(firstNum/secondNum);
                resultTx.setText("Result is: " +result);
            }
    });



    }

    protected void numFinder()
    {
        firstNum = Integer.parseInt(num1.getText().toString());
        secondNum = Integer.parseInt(num2.getText().toString());
```

}}

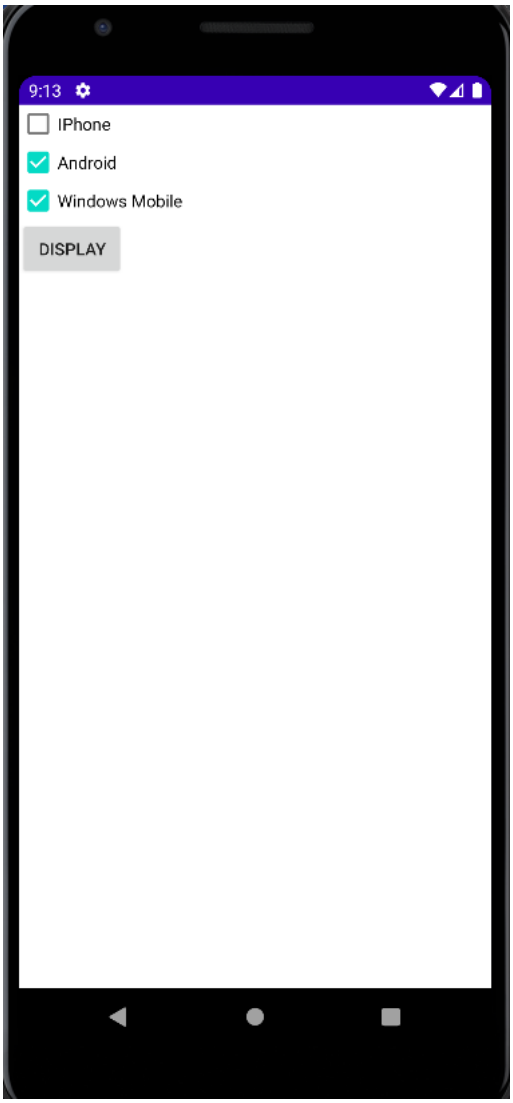
ActivityMain.xml

```
<?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"
    android:orientation="vertical">

    <EditText
        android:id="@+id/etnum1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="enter first number"
        android:layout_margin="25dp"
        android:inputType="number"
        />

    <EditText
        android:id="@+id/etnum2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="enter second number"
        android:layout_margin="25dp"
        android:inputType="number"
        />


    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <Button
            android:id="@+id/btnAdd"
            android:text="+"
            android:layout_margin="5dp"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            />
        <Button
```

```
 android:id="@+id/btnMinus"
          android:text="-"
          android:layout_margin="5dp"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          />
       <Button
          android:id="@+id/btnMul"
          android:text="*"
          android:layout_margin="5dp"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          />
       <Button
          android:id="@+id/btnDiv"
          android:text="/"
          android:layout_margin="5dp"
          android:layout_width="wrap_content"
          android:layout_height="wrap_content"
          />

    </LinearLayout>

    <TextView
       android:id="@+id/txtResult"
       android:layout_margin="80dp"
       android:textSize="30dp"
       android:textStyle="bold"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       app:layout_constraintBottom_toBottomOf="parent"
       app:layout_constraintEnd_toEndOf="parent"
       app:layout_constraintStart_toStartOf="parent"
       app:layout_constraintTop_toTopOf="parent" />



</LinearLayout>
```

RESULT: The program is executed and output is verified

OUTPUT :



4. CHECKBOX

AIM: Write a program to demonstrate checkbox

Date:

PROGRAM CODE

MainActivity.Java

```
package com.example.check;
import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.Toast;
public class MainActivity extends Activity {

    private CheckBox chkIos, chkAndroid, chkWindows;
    private Button btnDisplay;

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
 setContentView(R.layout.activity_main);
        addListenerOnChkIos();
        addListenerOnButton();
    }
    public void addListenerOnChkIos() {

        chkIos = (CheckBox) findViewById(R.id.chkIos);

        chkIos.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                //is chkIos checked?
                if (((CheckBox) v).isChecked()) {
                    Toast.makeText(MainActivity.this,
                            "Bro, try Android :)", Toast.LENGTH_LONG).show();
                }
            }
        });

    }
```

```
 public void addListenerOnButton() {
       chkIos = (CheckBox) findViewById(R.id.chkIos);
       chkAndroid = (CheckBox) findViewById(R.id.chkAndroid);
       chkWindows = (CheckBox) findViewById(R.id.chkWindows);
       btnDisplay = (Button) findViewById(R.id.btnDisplay);

       btnDisplay.setOnClickListener(new OnClickListener() {

          //Run when button is clicked
          @Override
          public void onClick(View v) {

             StringBuffer result = new StringBuffer();
             result.append("IPhone check : ").append(chkIos.isChecked());
             result.append("\nAndroid check : ").append(chkAndroid.isChecked());
             result.append("\nWindows Mobile check :").append(chkWindows.isChecked());

             Toast.makeText(MainActivity.this, result.toString(),
                   Toast.LENGTH_LONG).show();

          }
       });
    }
}
```

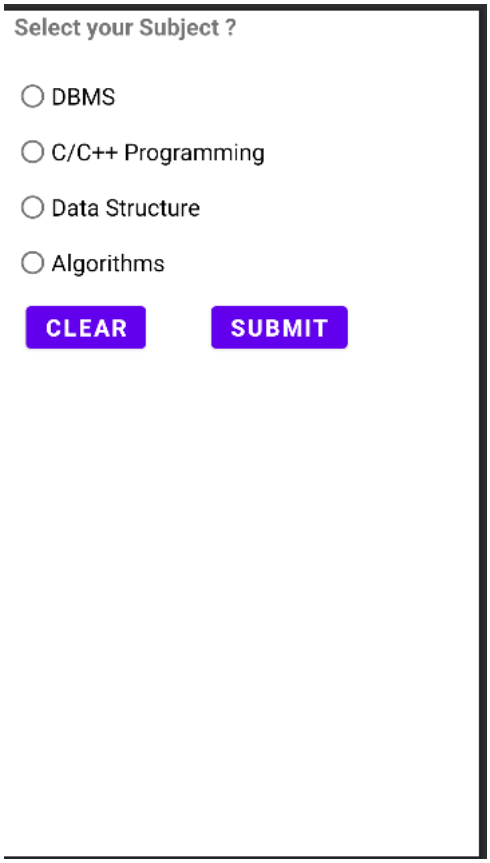
ActivityMain.xml

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

    <CheckBox
        android:id="@+id/chkIos"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/chk_ios" />

    <CheckBox
        android:id="@+id/chkAndroid"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/chk_android"
        android:checked="true" />

    <CheckBox
        android:id="@+id/chkWindows"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/chk_windows" />

    <Button
        android:id="@+id/btnDisplay"
        android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
        android:text="@string/btn_display" />

</LinearLayout>
```

RESULT: The program is executed and output is verified

OUTPUT :


Select your Subject ?
DBMS
C/C++ Programming
Data Structure
Algorithms
CLEAR
SUBMIT

5. RADIO BUTTON

AIM: Write a program to demonstrate radio button

Date:

PROGRAM CODE

MainActivity.Java

```
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
        // Define the object for Radio Group,
        // Submit and Clear buttons
        private RadioGroup radioGroup;
        Button submit, clear;
        @Override
        protected void onCreate(Bundle savedInstanceState)
        {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);
```

```
// Bind the components to their respective objects
                // by assigning their IDs
                // with the help of findViewById() method
                submit = (Button)findViewById(R.id.submit);
                clear = (Button)findViewById(R.id.clear);
                radioGroup = (RadioGroup)findViewById(R.id.groupradio);

                // Uncheck or reset the radio buttons initially
                radioGroup.clearCheck();

                // Add the Listener to the RadioGroup
                radioGroup.setOnCheckedChangeListener(
                        new RadioGroup
                                .OnCheckedChangeListener() {
                                        @Override

                                        // The flow will come here when
                                        // any of the radio buttons in the radioGroup
                                        // has been clicked

                                        // Check which radio button has been clicked
                                        public void onCheckedChanged(RadioGroup group,
                                                                     int
checkedId)
                                        {
```

```
        // Get the selected Radio Button
                                RadioButton
                                        radioButton
                                        = (RadioButton)group
                                                .findViewById(checkedId);
                        }
                });


        // Add the Listener to the Submit Button
        submit.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v)
                {
                        // When submit button is clicked,
                        // Ge the Radio Button which is set
                        // If no Radio Button is set, -1 will be returned
                        int selectedId = radioGroup.getCheckedRadioButtonId();
                        if (selectedId == -1) {
                                Toast.makeText(MainActivity.this,
                                                "No answer has been selected",
                                                Toast.LENGTH_SHORT)
                                        .show();
                        }
```

```
else {

                    RadioButton radioButton
                        = (RadioButton)radioGroup
                            .findViewById(selectedId);


                    // Now display the value of selected item
                    // by the Toast message
                    Toast.makeText(MainActivity.this,
                                   radioButton.getText(),
                                   Toast.LENGTH_SHORT)
                        .show();
                }
            }
        });
        // Add the Listener to the Submit Button
        clear.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v)
            {
                // Clear RadioGroup
                // i.e. reset all the Radio Buttons
                radioGroup.clearCheck();
            }
```

```
        });
        }
}
```

ActivityMain.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:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Select your Subject ?"
                android:textStyle="bold"
                android:layout_marginLeft="10dp"
                android:textSize="20sp"/>
        <!-- add RadioGroup which contain the many RadioButton-->
        <RadioGroup
                android:layout_marginTop="50dp"
                android:id="@+id/groupradio"
```

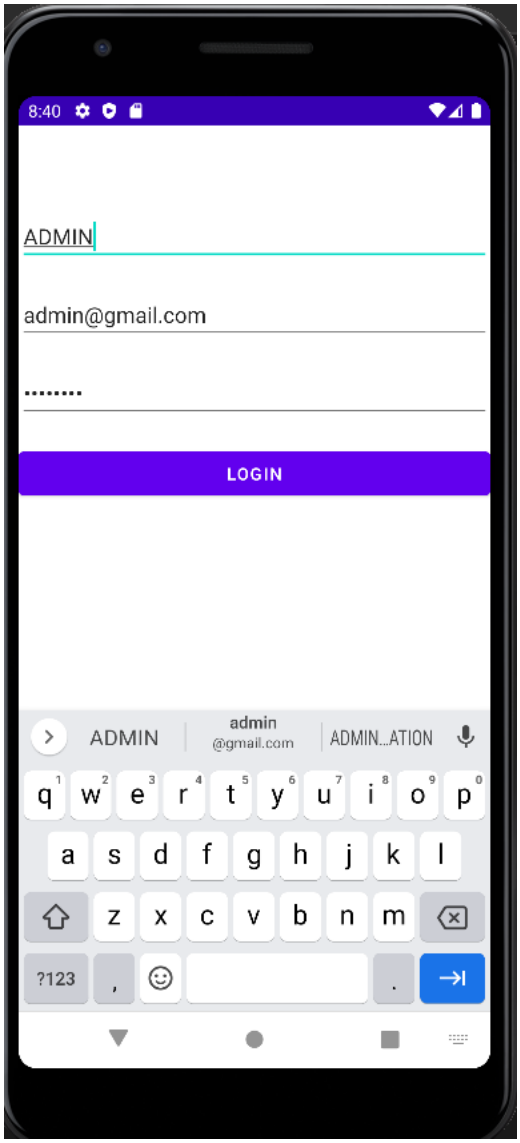
```
android:layout_marginLeft="10dp"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content">

            <!-- In RadioGroup create the 1 Radio Button-->
            <!-- like this we will add some more Radio Button-->
            <RadioButton
                  android:layout_width="fill_parent"
                  android:layout_height="wrap_content"
                  android:id="@+id/radia_id1"
                  android:text="DBMS"
                  android:textSize="20sp"/>

            <RadioButton
                  android:layout_width="fill_parent"
                  android:layout_height="wrap_content"
                  android:id="@+id/radia_id2"
                  android:text="C/C++ Programming"
                  android:textSize="20sp"/>
            <RadioButton
                  android:layout_width="fill_parent"
                  android:layout_height="wrap_content"
                  android:id="@+id/radia_id3"
                  android:text="Data Structure"
                  android:textSize="20sp"/>
```

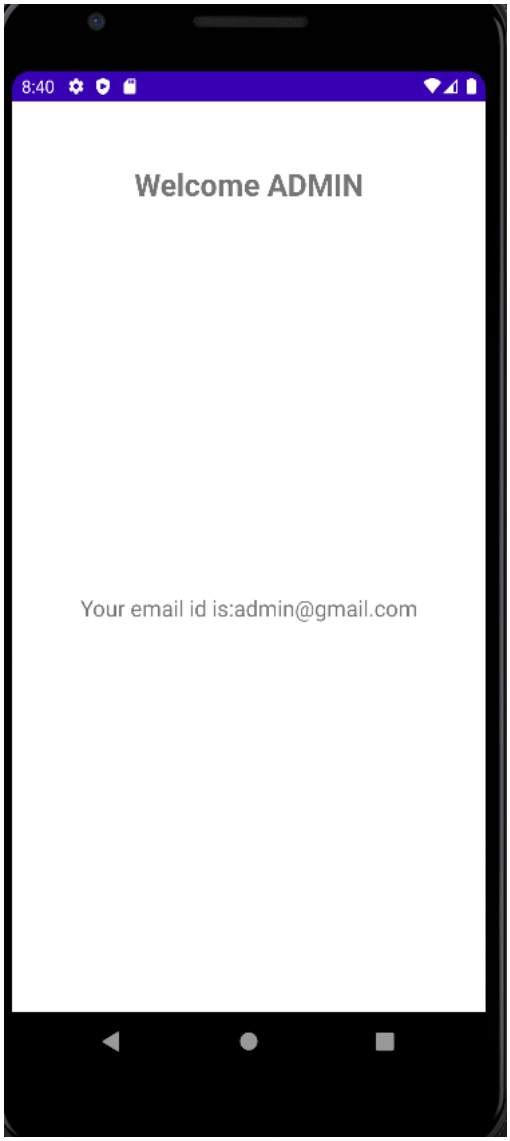
```
        <RadioButton
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:id="@+id/radia_id4"
            android:text="Algorithms"
            android:textSize="20sp"/>
    </RadioGroup>

    <!-- add button For Submit the Selected item-->
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit"
        android:id="@+id/submit"
        android:textStyle="bold"
        android:textSize="20sp"
        android:layout_marginTop="200dp"
        android:layout_marginLeft="180dp"
        />
    <!-- add clear button for clear the selected item-->
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Clear"
        android:id="@+id/clear"
```

```
android:textSize="20sp"
                android:textStyle="bold"
                android:layout_marginTop="200dp"
                android:layout_marginLeft="20dp"
                />
</RelativeLayout>
```

RESULT: The program is executed and output is verified

OUTPUT:


8:40
ADMIN
admin@gmail.com
.....
LOGIN
ADMIN
admin
@gmail.com
ADMIN...ATION


8:40
Welcome ADMIN
Your email id is:admin@gmail.com

6. EXPLICIT INTENT

AIM: Develop and android application that passes data using explicit intent, while navigating from the first activity to the second activity

Date:

PROGRAM CODE

MainActivity.Java

```
package com.example.loginapp;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
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 {

    String strName,strEmail,strPassword;
    EditText email,password,name;
    Button loginbtn;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

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

        name = findViewById(R.id.editTextTextName);
        email = findViewById(R.id.editTextTextEmailAddress);
        password = findViewById(R.id.editTextTextPassword);
        loginbtn = findViewById(R.id.btn);



        loginbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                strName = name.getText().toString();
                strEmail=email.getText().toString();
                strPassword=password.getText().toString();

                if(strEmail.equals("admin@gmail.com") && strPassword.equals("admin123") )
                {
                    Intent myFirstIntent = new Intent(MainActivity.this,HomePage.class);

                    myFirstIntent.putExtra("username",strName);
                    myFirstIntent.putExtra("useremail",strEmail);

                    startActivity(myFirstIntent);
                    Toast.makeText(MainActivity.this, "Login Success", Toast.LENGTH_SHORT).show();
                }
                else
```

```
    {
                Toast.makeText(MainActivity.this, "Login Failed", Toast.LENGTH_SHORT).show();
            }


        }
      });


    }
}
```

HomePageJava

```
package com.example.loginapp;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.widget.TextView;

public class HomePage extends AppCompatActivity {

    TextView welcomeBanner,emailBanner;
    String uname,email;

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


      uname = getIntent().getStringExtra("username");
      email = getIntent().getStringExtra("useremail");

      welcomeBanner = findViewById(R.id.welcomeBanner);
      emailBanner = findViewById(R.id.emailBanner);

      welcomeBanner.setText("Welcome "+uname);
      emailBanner.setText("Your email id is:"+email);

    }
}
```

Activity_home_page.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=".HomePage"
    android:orientation="vertical">

    <TextView
        android:layout_marginTop="50dp"
        android:textSize="25dp"
        android:textStyle="bold"
        android:id="@+id/welcomeBanner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="WELCOME"
        android:textAllCaps="false"/>
    <TextView
        android:textSize="18dp"
        android:id="@+id/emailBanner"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:gravity="center"
        android:text="Your email is: "/>

</LinearLayout>
```

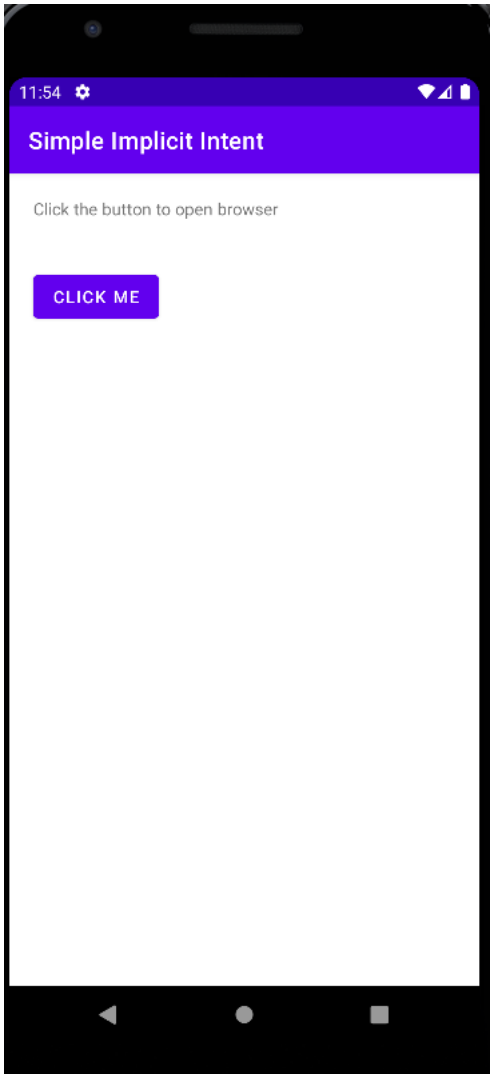
Activity_main.xml

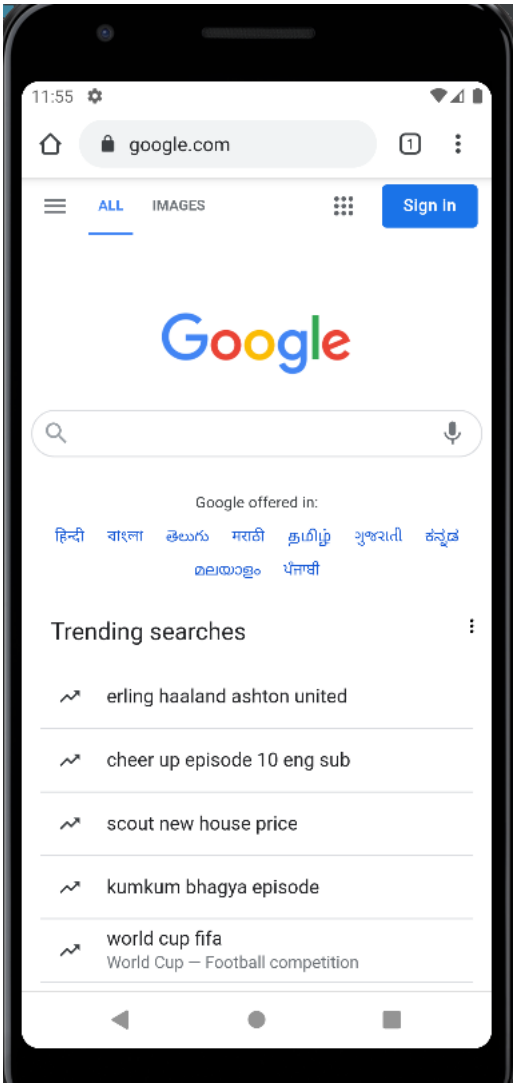
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"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

```
    <EditText
        android:id="@+id/editTextTextName"
        android:layout_width="match_parent"
        android:layout_marginTop="70dp"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="text"
        android:hint="enter name"/>

    <EditText
        android:id="@+id/editTextTextEmailAddress"
        android:layout_width="match_parent"
        android:layout_marginTop="20dp"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textEmailAddress"
        android:hint="enter email"/>

    <EditText

        android:layout_marginTop="20dp"
        android:id="@+id/editTextTextPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPassword"
        android:hint="enter password"/>

    <Button
        android:id="@+id/btn"
        android:text="Login"
        android:layout_marginTop="20dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

</LinearLayout>
```

RESULT: The program is executed and output is verified

OUTPUT :


11:54
Simple Implicit Intent
Click the button to open browser
CLICK ME


11:55
google.com
ALL
IMAGES
Sign in
Google
Google offered in:
हिन्दी বাংলা తెలుగు मराठी தமிழ் ગુજરાતી ಕನ್ನಡ
മലയാളം ਪੰਜਾਬੀ
Trending searches
erling haaland ashton united
cheer up episode 10 eng sub
scout new house price
kumkum bhagya episode
world cup fifa
World Cup — Football competition

7. IMPLICIT INTENT

AIM: Develop and android application that open the browser on a button click using implicit intent

Date:

PROGRAM CODE

MainActivity.Java

```
package com.example.simpleimplicitintent;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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


        btn = findViewById(R.id.btn);


        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                Toast.makeText(MainActivity.this, "opening browser..", Toast.LENGTH_SHORT).show();
                Intent myIntent = new Intent();

                myIntent.setAction(Intent.ACTION_VIEW);
```

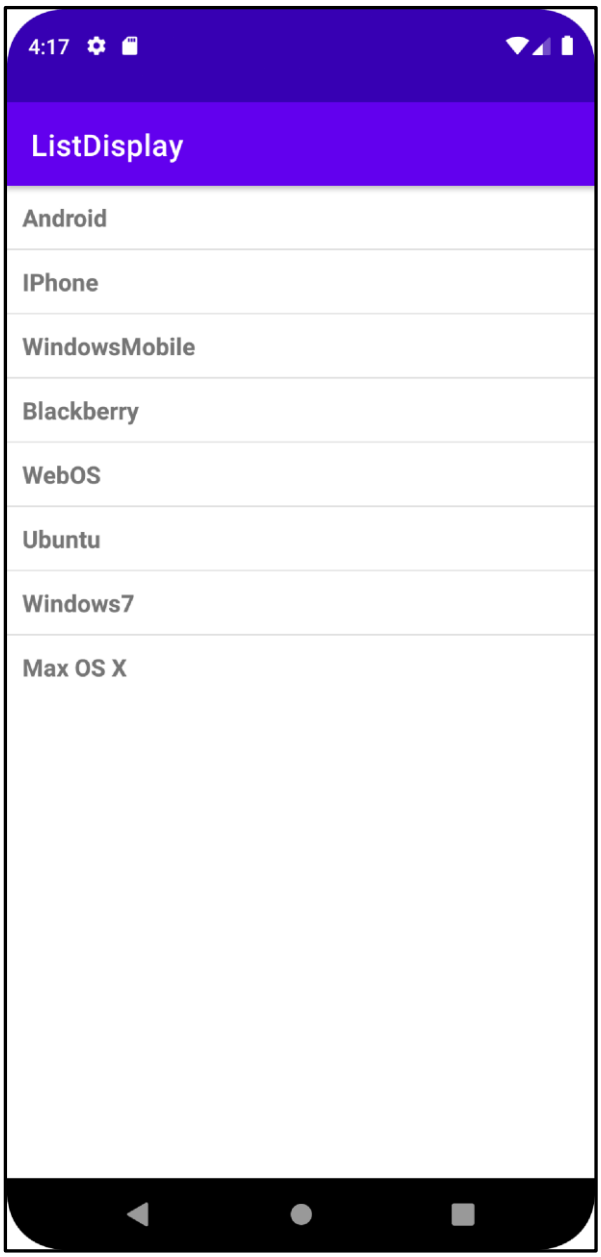
```
    myIntent.setData(Uri.parse("https://google.com"));
                startActivity(myIntent);
            }
        });



    }
}
```

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"
    android:orientation="vertical">

    <TextView
        android:layout_margin="20dp"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Click the button to open browser"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:layout_margin="20dp"
        android:gravity="center"
        android:id="@+id/btn"
        android:text="CLICK ME"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>
</LinearLayout>
```

RESULT: The program is executed and output is verified

OUTPUT:


4:17
ListDisplay
Android
IPhone
WindowsMobile
Blackberry
WebOS
Ubuntu
Windows7
Max OS X

Date:

8. LIST

AIM: Develop an android application that implements the list.

PROGRAM CODE:

MainActivity.java

```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemSelectedListener {
   String[] mobileArray = {"Android","IPhone","WindowsMobile","Blackberry",
"WebOS","Ubuntu","Windows7","Max OS X"};

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_main);
      ArrayAdapter adapter = new ArrayAdapter<String>(this, R.layout.activity_listview,
mobileArray);

      ListView listView = (ListView) findViewById(R.id.mobile_list);
      listView.setOnItemSelectedListener(this);
      listView.setAdapter(adapter);;
   }
   @Override
   public void onItemSelected(AdapterView<?> parent, View view, int pos, long id) {
      Toast.makeText(this, "Selected item: " + " "+parent.getItemAtPosition(pos),
Toast.LENGTH_SHORT).show();
   }

   @Override
   public void onNothingSelected(AdapterView<?> parent) {
   }
}
```

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"
   tools:context=".MainActivity" >

   <ListView
      android:id="@+id/mobile_list"
      android:layout_width="match_parent"
      android:layout_height="wrap_content" >
   </ListView>

</LinearLayout>
```

Strings.xml

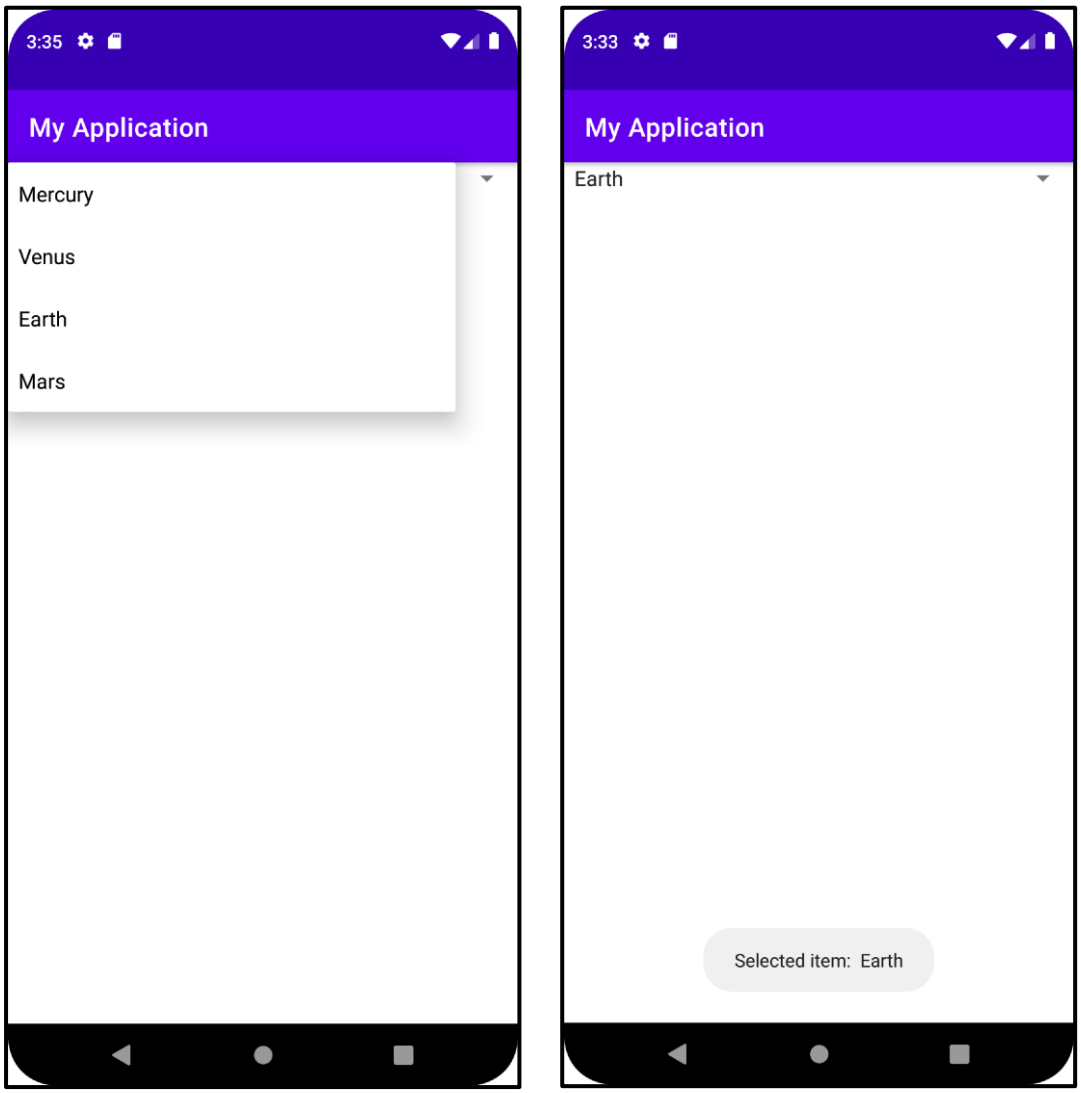
```
<?xml version="1.0" encoding="utf-8"?>
<resources>
   <string name="app_name">ListDisplay</string>
   <string name="action_settings">Settings</string>
</resources>
```

activity_listview.xml

```
<?xml version="1.0" encoding="utf-8"?>
<TextView xmlns:android="http://schemas.android.com/apk/res/android"
   android:id="@+id/label"
   android:layout_width="fill_parent"
   android:layout_height="fill_parent"
   android:padding="10dip"
   android:textSize="16dip"
   android:textStyle="bold" >
</TextView>
```

RESULT: The program is executed and output is verified

OUTPUT:


3:35
My Application
Mercury
Venus
Earth
Mars
3:33
My Application
Earth
Selected item: Earth

Date:

9. SPINNER

AIM: Develop an android application that implements the spinner.

PROGRAM CODE:

MainActivity.java

```
package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements
AdapterView.OnItemSelectedListener {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Spinner spinner = (Spinner) findViewById(R.id.planets_spinner);
        spinner.setOnItemSelectedListener(this);
        ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(this,
R.array.planets_array, android.R.layout.simple_spinner_item);
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        spinner.setAdapter(adapter);
    }

    @Override
    public void onItemSelected(AdapterView<?> parent, View view, int pos, long id) {
        Toast.makeText(this, "Selected item: " + " "+parent.getItemAtPosition(pos),
Toast.LENGTH_SHORT).show();
    }

    @Override
    public void onNothingSelected(AdapterView<?> parent) {
    }
}
```

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">

    <Spinner
        android:id="@+id/planets_spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />

</LinearLayout>
```

Strings.xml

```
<resources>
    <string name="app_name">My Application</string>
    <string-array name="planets_array">
        <item>Mercury</item>
        <item>Venus</item>
        <item>Earth</item>
        <item>Mars</item>
    </string-array>
</resources>
```

RESULT: The program is executed and output is verified