

PROGRAM 1

Write a program to Toast Hello World.

USER INTERFACE



XML FILE

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.bca4.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/rose" />

</RelativeLayout>
```

JAVA FILE

```
package com.example.bca4;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {
```

```
Button btn1;

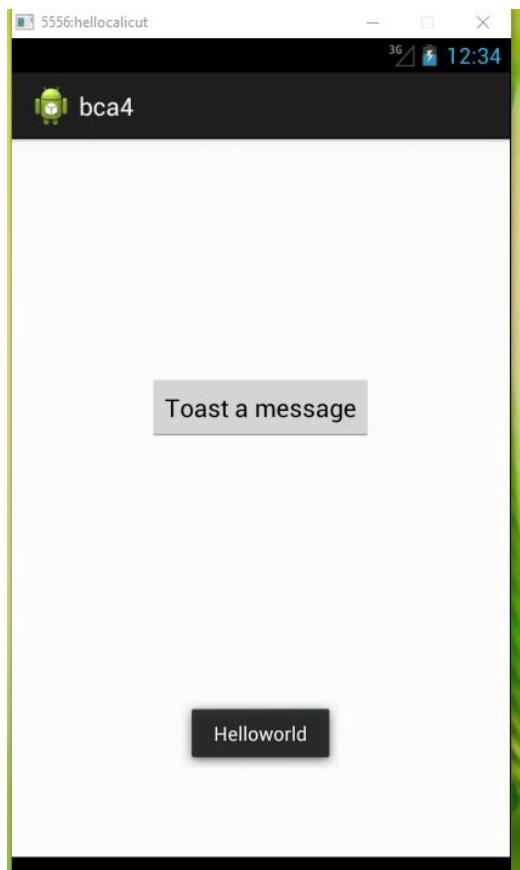
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    Button btn1=(Button)findViewById(R.id.button1);
    btn1.setOnClickListener(new OnClickListener() {

        @Override
        public void onClick(View v) {

            Toast.makeText(MainActivity.this,
"HelloWorld",Toast.LENGTH_LONG).show();
        }
    });
}
```

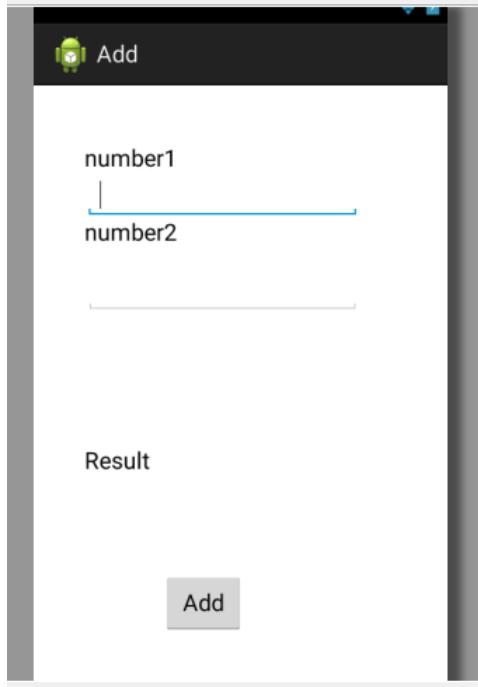
OUTPUT



PROGRAM 2

Write a program to Add Two Numbers.

USER INTERFACE



XML FILE

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.bca.add.MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:text="@string/num1" />

    <EditText
        android:id="@+id/editText1"
        android:inputType="numberDecimal" />

    <TextView
        android:id="@+id/textView2"
        android:text="@string/num2"/>

    <EditText
        android:id="@+id/editText2"
        android:inputType="numberDecimal" />

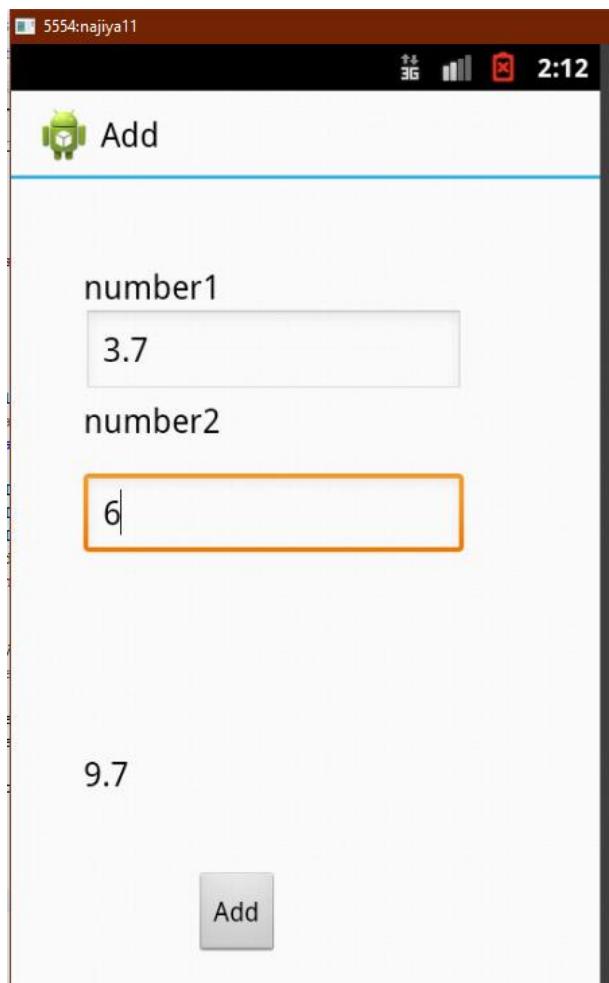
    <TextView
        android:id="@+id/textView3"
        android:text="@string/ad1"/>
```

```
<Button  
    android:id="@+id/button1"  
    android:text="@string/ad" />  
  
</RelativeLayout>
```

JAVA FILE

```
package com.bca.add;  
  
import android.support.v7.app.ActionBarActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.view.View.OnClickListener;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class MainActivity extends ActionBarActivity {  
    Button btn1;  
    TextView Tv3;  
    EditText ET1,ET2;  
    Float num1,num2,sum;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        ET1=(EditText)findViewById(R.id.editText1);  
        ET2=(EditText)findViewById(R.id.editText2);  
        Tv3=(TextView)findViewById(R.id.textView3);  
        btn1=(Button)findViewById(R.id.button1);  
        btn1.setOnClickListener(new OnClickListener() {  
  
            @Override  
            public void onClick(View v) {  
  
                num1 =Float.parseFloat(ET1.getText().toString());  
                num2 =Float.parseFloat(ET2.getText().toString());  
                sum=num1+num2;  
                Tv3.setText(Float.toString(sum));  
            }  
        });  
    }  
}
```

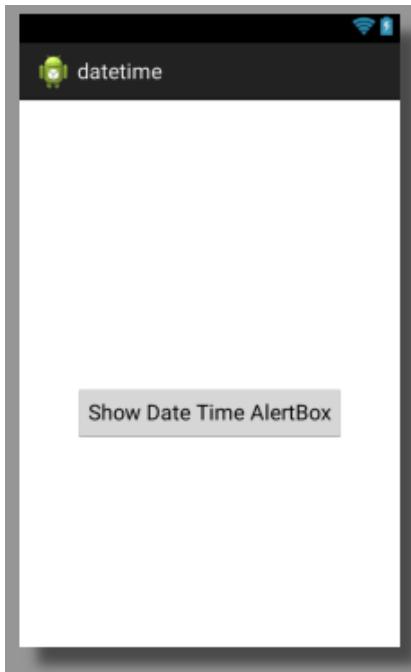
OUTPUT



PROGRAM 3

Write a program to display date and time using dialog box.

USER INTERFACE



XML FILE

```
RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.bca.datetime.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.bca.datetime;

import java.util.Calendar;

import android.support.v7.app.ActionBarActivity;
import android.app.AlertDialog;
import android.content.DialogInterface;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
```

```

public class MainActivity extends ActionBarActivity {

    Button btn;
    int year,month,day,hour,minute,second;
    String sysdate,systime;

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

        btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {

                AlertDialog.Builder b1=new
                AlertDialog.Builder(MainActivity.this);
                b1.setTitle("System Date and Time");
                b1.setMessage("Current System Date
                :" +sysdate+"\nCurrent System Time :" +systime);
                b1.setPositiveButton("ok", new
                DialogInterface.OnClickListener() {

                    @Override
                    public void onClick(DialogInterface dialog,
int which) {
                        // TODO Auto-generated method stub\

                        Calendar c1=Calendar.getInstance();
                        year=c1.get(Calendar.YEAR);
                        month=c1.get(Calendar.MONTH);
                        day=c1.get(Calendar.DAY_OF_MONTH);
                        hour=c1.get(Calendar.HOUR_OF_DAY);
                        minute=c1.get(Calendar.MINUTE);
                        second=c1.get(Calendar.SECOND);
                        sysdate= day+"/"+(month+1)+"/"+year;
                        systime= hour+"/"+minute+"/"+second;

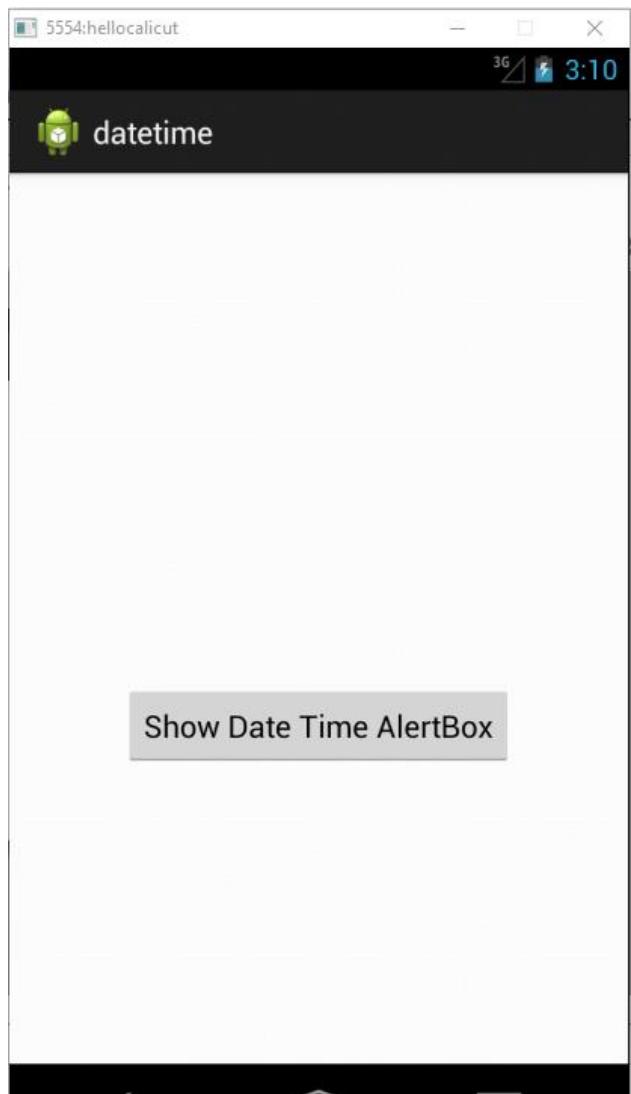
                    }
                });
                AlertDialog d=b1.create();
                d.show();

            }
        });
    }

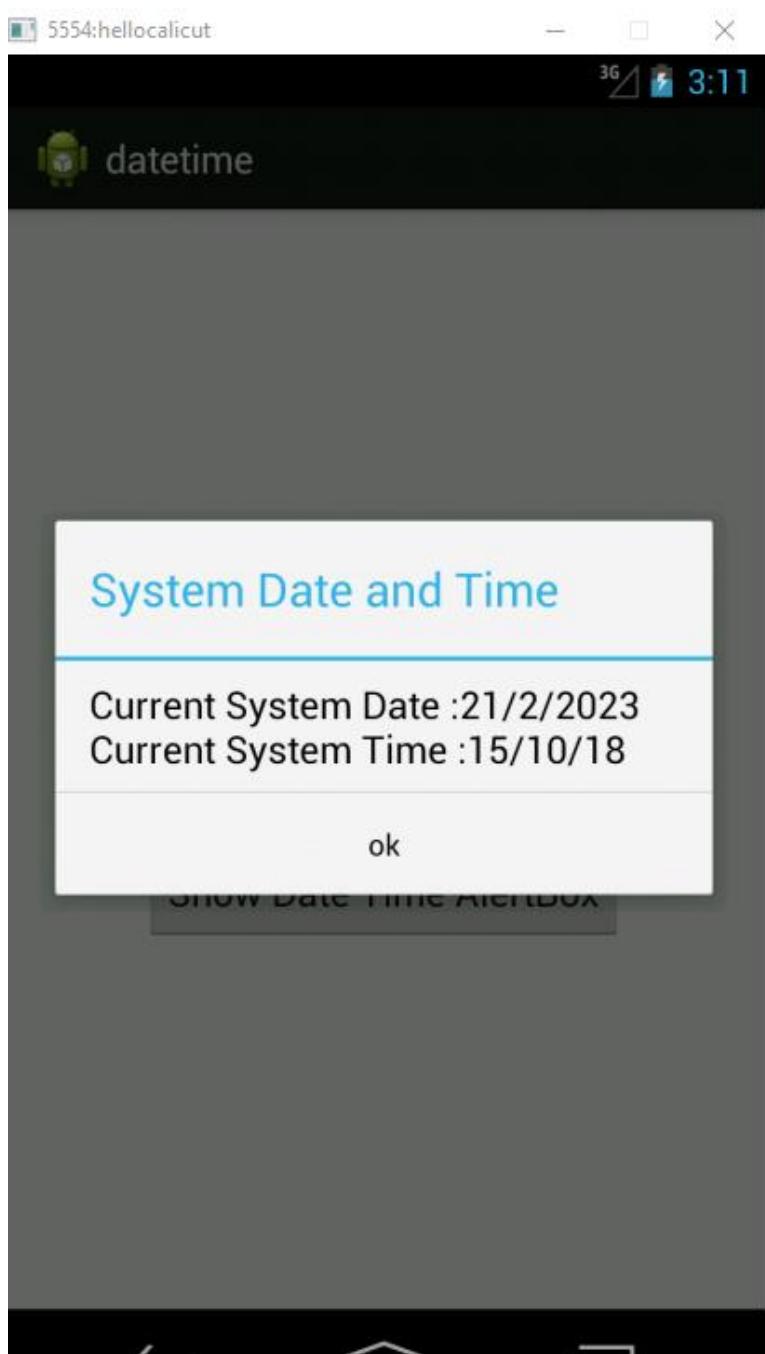
}

```

OUTPUT 1



OUTPUT 2



PROGRAM 4

Write a program to display an alert box with OK and Cancel.

USER INTERFACE



XML FILE

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.alertbox1.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/str" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.example.alertbox1;

import android.support.v7.app.ActionBarActivity;
import android.app.AlertDialog;
import android.content.DialogInterface;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {
```

```
Button btn;

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

    btn=(Button)findViewById(R.id.button1);
    btn.setOnClickListener(new OnClickListener()
    {

        @Override
        public void onClick(View v) {

AlertDialog.Builder b1=new AlertDialog.Builder(MainActivity.this);
b1.setTitle("alertbox");
b1.setMessage("hello this is an alert box");
b1.setPositiveButton("ok",new DialogInterface.OnClickListener() {

        @Override
        public void onClick(DialogInterface dialog, int which) {

Toast.makeText(MainActivity.this,"you click
button",Toast.LENGTH_LONG).show();

        }
    });
b1.setNegativeButton("cancel",new DialogInterface.OnClickListener() {

        @Override
        public void onClick(DialogInterface dialog, int which) {

Toast.makeText(MainActivity.this,"you clicked cancel
button",Toast.LENGTH_LONG).show();

        }
    });

AlertDialog ad=b1.create();
ad.show();

    }
});
```

OUTPUT



OUTPUT 2

PROGRAM 5

Write a program to create menu with three menu items.

USER INTERFACE



XML FILE

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.menu.MainActivity" >

</RelativeLayout>
```

main.xml

```
<menu 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"
    tools:context="com.cs.menu.MainActivity" >

    <item
        android:id="@+id/cuts"
        android:orderInCategory="100"
        android:title="@string/cut"
        app:showAsAction="never"/>

    <item
        android:id="@+id/copy"
        android:orderInCategory="100"
        android:title="@string/copy"
        app:showAsAction="never"/>

    <item
        android:id="@+id/paste"
        android:orderInCategory="100"
        android:title="@string/paste"
        app:showAsAction="never"/>

    <item
        android:id="@+id/save"
        android:orderInCategory="100"
        android:title="@string/save"
        app:showAsAction="never"/>
```

```
        android:title="@string/save"
        app:showAsAction="never"/>

    </menu>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.menu;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {

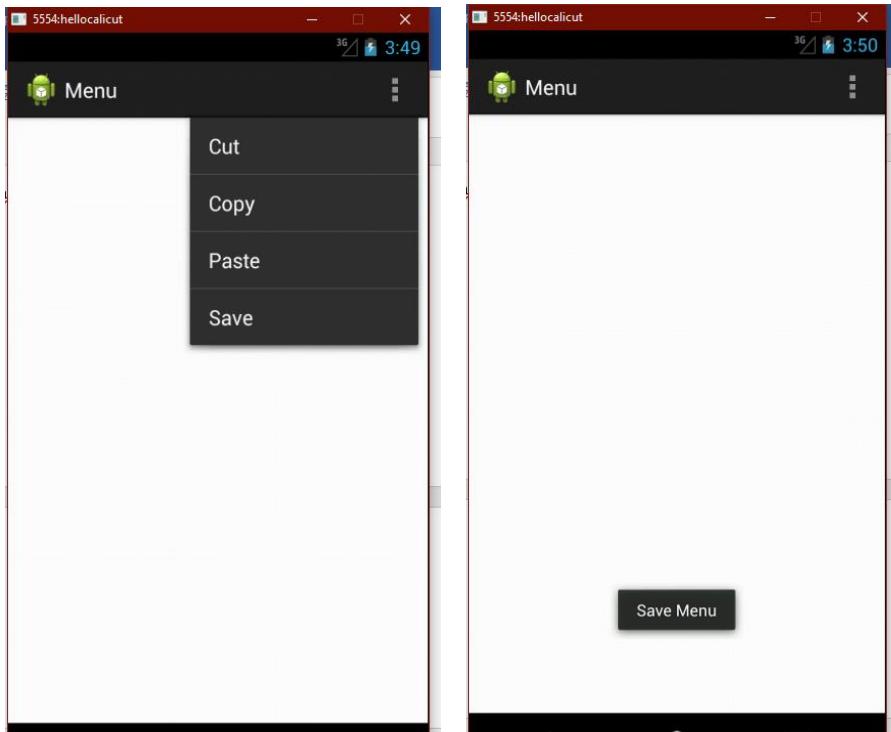
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {

        getMenuInflater().inflate(R.menu.main, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        int id=item.getItemId();
        if(id==R.id.copy){
            Toast.makeText(MainActivity.this,"Copy Menu",Toast.LENGTH_SHORT).show();
        }
        else if(id==R.id.cuts) {
            Toast.makeText(MainActivity.this,"Cut Menu",Toast.LENGTH_SHORT).show();
        }
        else if (id==R.id.paste) {
            Toast.makeText(MainActivity.this,"Paste Menu",Toast.LENGTH_SHORT).show();
        }
        else if (id==R.id.save) {
            Toast.makeText(MainActivity.this,"Save Menu",Toast.LENGTH_SHORT).show();
        }
        return super.onOptionsItemSelected(item);
    }
}
```

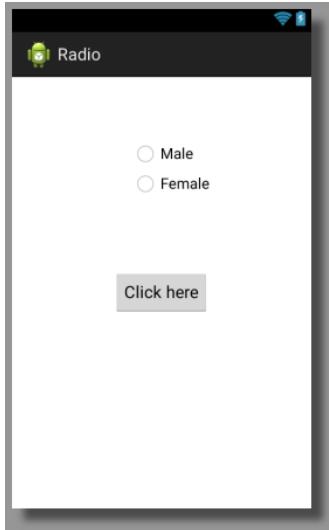
OUTPUT



PROGRAM 6

Write a program to Select gender using RadioButton.

USER INTERFACE



XML FILE

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.harsh.radio.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/click" />

    <RadioGroup
        android:id="@+id/radioGroup1"
        android:layout_alignRight="@+id/button1" >

        <RadioButton
            android:id="@+id/radio0"
            android:checked="false"
            android:text="@string/m" />

        <RadioButton
            android:id="@+id/radio1"
            android:text="@string/f" />

    </RadioGroup>
</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.harsh.radio;
```

```
import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {

    RadioGroup radioSexGroup;
    RadioButton radioSexButton;
    Button btn;

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

        radioSexGroup=(RadioGroup)findViewById(R.id.radioGroup1);
        btn=(Button)findViewById(R.id.button1);
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
```

```
        int selectedID=radioSexGroup.getCheckedRadioButtonId();
        radioSexButton=(RadioButton)findViewById(selectedID);

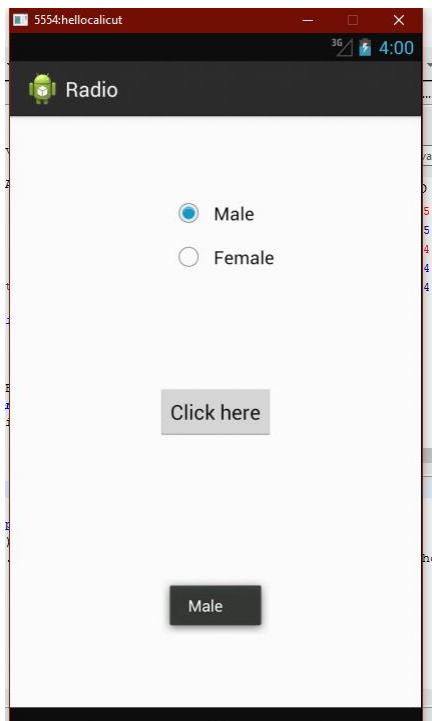
        Toast.makeText(MainActivity.this,radioSexButton.getText(),Toast.LENGTH_SHORT).show();
    }

});
```

}

}

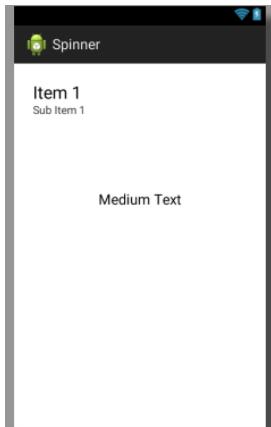
OUTPUT



PROGRAM 7

Write a program to Spin the four items.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.spinner.MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:text="Medium Text"/>

    <Spinner
        android:id="@+id/spinner1"
        android:layout_alignRight="@+id/textView1"/>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.spinner;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemSelectedListener;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
import android.widget.TextView;

public class MainActivity extends ActionBarActivity implements OnItemSelectedListener {
```

```

Spinner ap;
TextView tv;
String [] items={"select","java","android","c-programming","kotlin"};

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

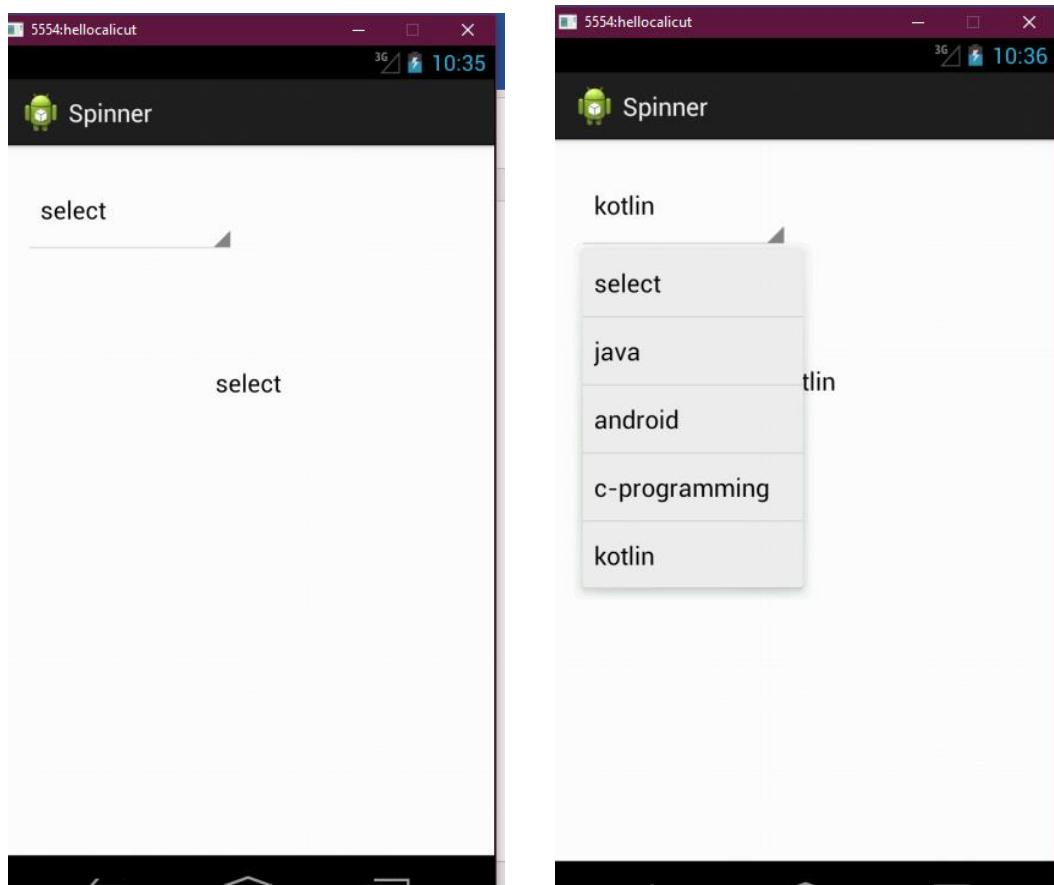
    ap=(Spinner)findViewById(R.id.spinner1);
    tv=(TextView)findViewById(R.id.textView1);
    ap.setOnItemSelectedListener(this);
    ArrayAdapter<String> adt=new ArrayAdapter<String>(this,
    android.R.layout.simple_list_item_1,items);
    ap.setAdapter(adt);
}

@Override
public void onItemSelected(AdapterView<?> arg0, View arg1, int arg2,
    long arg3) {

    tv.setText(items[arg2]);
}
}

```

OUTPUT



PROGRAM 8

Write a program to display Stop Watch.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.timer.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/st" />

    <Button
        android:id="@+id/button2"
        android:text="@string/rs" />

    <Button
        android:id="@+id/button3"
        android:text="@string/stp" />

    <TextView
        android:id="@+id/textView1"
        android:text="@string/medtxt"/>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.example.timer;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.os.Handler;
import android.os.SystemClock;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends ActionBarActivity {

    private Button sB;
    private Button pB;
    private Button rB;

    private TextView tm;

    private long sT=01;

    private Handler cH=new Handler();

    long ts=01;
    long tSB=01;
    long uT=01;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tm=(TextView) findViewById(R.id.textView1);
        sB=(Button) findViewById(R.id.button1);
        sB.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {

                sT=SystemClock.uptimeMillis();
                cH.postDelayed(updateTimerThread,0);

            }
        });
        rB=(Button) findViewById(R.id.button2);
        rB.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                tm.setText("00:00:00");
            }
        });
        pB=(Button) findViewById(R.id.button3);
        pB.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
```

```

        tSB =ts;
        cH.removeCallbacks(updateTimerThread);
    }
}
}

private Runnable updateTimerThread = new Runnable() {
    @Override
    public void run() {
        ts = SystemClock.uptimeMillis()-sT;
        uT = tSB + ts;
        int secs =(int) (uT/1000);
        int mins = secs/60;
        secs =secs%60;
        int mS=(int) (uT%1000);
        tm.setText(""+mins+":"+
                    + String.format("%02d", secs)+":"
                    + String.format("%03d",mS));
        cH.postDelayed(this,0);
    }
};
}

```

OUTPUT



PROGRAM 9

Write a program to check the items listed.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.checkbox.MainActivity" >

    <CheckBox
        android:id="@+id/checkBox1"
        android:text="@string/ch1" />

    <CheckBox
        android:id="@+id/checkBox2"
        android:text="@string/ch2" />

    <CheckBox
        android:id="@+id/checkBox3"
        android:text="@string/ch3" />

    <CheckBox
        android:id="@+id/checkBox4"
        android:text="@string/ch4" />

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

    <TextView
        android:id="@+id/textView1"
        android:text="@string/txtv"/>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.example.checkbox;

import android.support.v7.app.ActionBarActivity;
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 ActionBarActivity {

    CheckBox android, java, c, php;
    Button btn;

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

        java=(CheckBox)findViewById(R.id.checkBox1);
        c=(CheckBox)findViewById(R.id.checkBox2);
        php=(CheckBox)findViewById(R.id.checkBox3);
        android=(CheckBox)findViewById(R.id.checkBox4);
        btn=(Button)findViewById(R.id.button1);
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub

                StringBuffer OUTPUT=new StringBuffer();
                OUTPUT.append("Java :").append(java.isChecked());
                OUTPUT.append("\n C Programming :").append(c.isChecked());
                OUTPUT.append("\n PHP :").append(php.isChecked());
                OUTPUT.append("\n Android :").append(android.isChecked());

                Toast.makeText(MainActivity.this,OUTPUT.toString(),Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

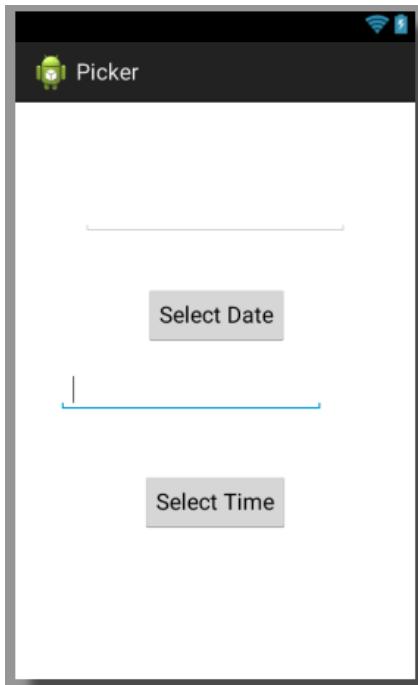
OUTPUT



PROGRAM 10

Write a program to select current system time using date time picker.

USER INTERFACE



XML FILE (activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs_picker.MainActivity" >

    <EditText
        android:id="@+id/editText1"
        android:inputType="time" />

    <Button
        android:id="@+id/button2"
        android:text="@string/b1" />

    <EditText
        android:id="@+id/editText2"
        android:inputType="date" >

    </EditText>

    <Button
        android:id="@+id/button1"
        android:text="@string/b2" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cspicker;

import java.util.Calendar;

import android.support.v7.app.ActionBarActivity;
import android.app.DatePickerDialog;
import android.app.TimePickerDialog;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.TimePicker;

public class MainActivity extends ActionBarActivity implements
OnClickListener {
Button btnDatePicker,btnTimePicker;
EditText etdate,ettime;
private int Year,Month,Day,Hour,Minute;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    btnDatePicker=(Button)findViewById(R.id.button1);
    btnTimePicker=(Button)findViewById(R.id.button2);
    etdate=(EditText)findViewById(R.id.editText1);
    ettime=(EditText)findViewById(R.id.editText2);
    btnDatePicker.setOnClickListener(this);
    btnTimePicker.setOnClickListener(this);

}

@Override
public void onClick(View v) {
    // TODO Auto-generated method stub
    final Calendar c=Calendar.getInstance();
    Year=c.get(Calendar.YEAR);
    Month=c.get(Calendar.MONTH);
    Day=c.get(Calendar.DAY_OF_MONTH);
    DatePickerDialog datePickerDialog=new DatePickerDialog(this,new
DatePickerDialog.OnDateSetListener() {

    @Override
    public void onDateSet(DatePicker view, int year, int
monthOfYear,
                           int dayOfMonth) {
        // TODO Auto-generated method stub
        etdate.setText(dayOfMonth+"-"+(monthOfYear+1)+"-"+year);
    }
}
}
```

```
    },Year,Month,Day);
datePickerDialog.show();

if(v==btnTimePicker) {
    final Calendar ca=Calendar.getInstance();
    Hour=ca.get(Calendar.HOUR_OF_DAY);
    Minute=ca.get(Calendar.MINUTE);
TimePickerDialog timePickerDialog=new TimePickerDialog(this,new
TimePickerDialog.OnTimeSetListener() {

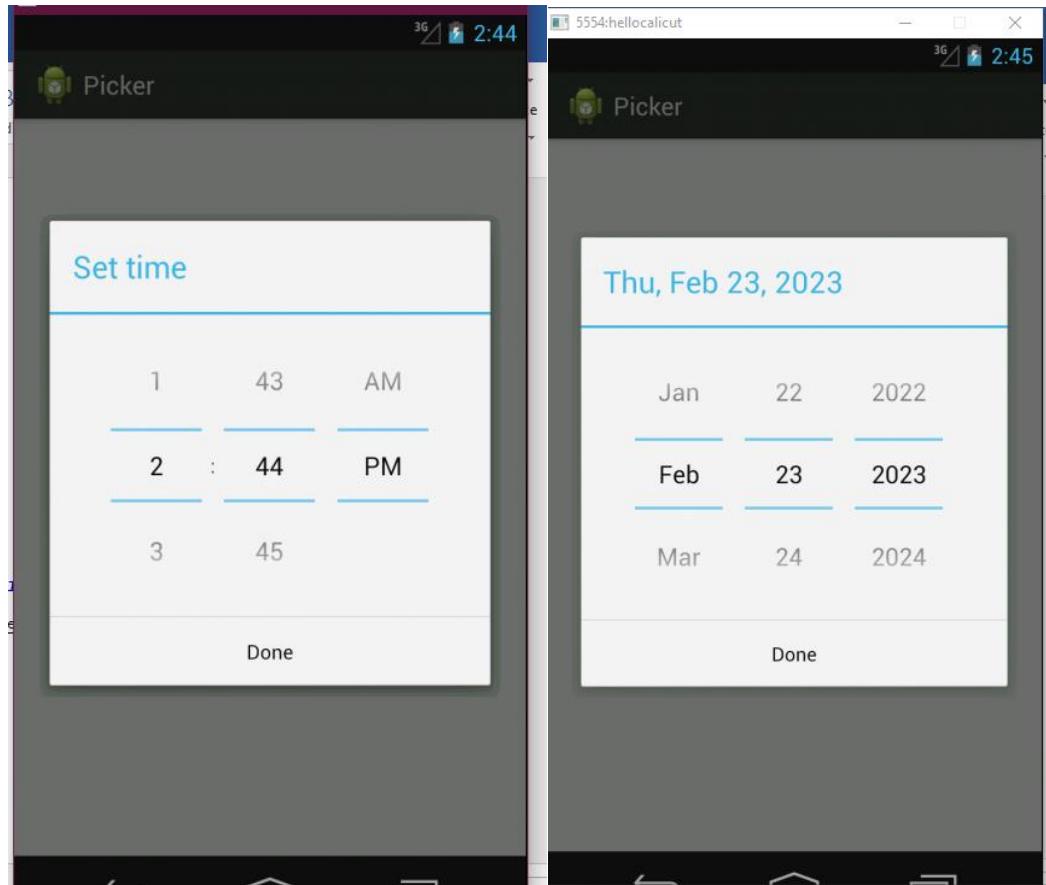
    @Override
    public void onTimeSet(TimePicker view, int hourOfDay, int
minute) {
        // TODO Auto-generated method stub
        ettime.setText(hourOfDay+":"+minute);

    }

},Hour,Minute,false);
timePickerDialog.show();
}

}
```

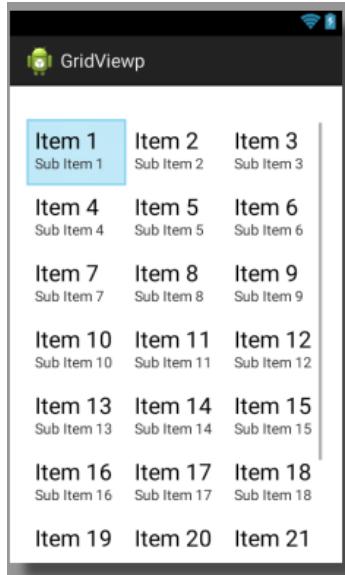
OUTPUT



PROGRAM 11

Write a program to display contacts using GridView Control.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.gridviewp.MainActivity" >

    <GridView
        android:id="@+id/gridView1"
        android:numColumns="3" >
    </GridView>

</RelativeLayout>
```

MANIFESTFILE

ipManifestfile

```
<uses-permission android:name="android.permission.READ_CONTACTS"/>
```

JAVA FILE

(MainActivity.java)

```
package com.example.gridviewp;

import android.support.v7.app.ActionBarActivity;
import android.database.Cursor;
import android.os.Bundle;
import android.provider.Contacts;
import android.widget.GridView;
import android.widget.SimpleCursorAdapter;

public class MainActivity extends ActionBarActivity {

    GridView gv;

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

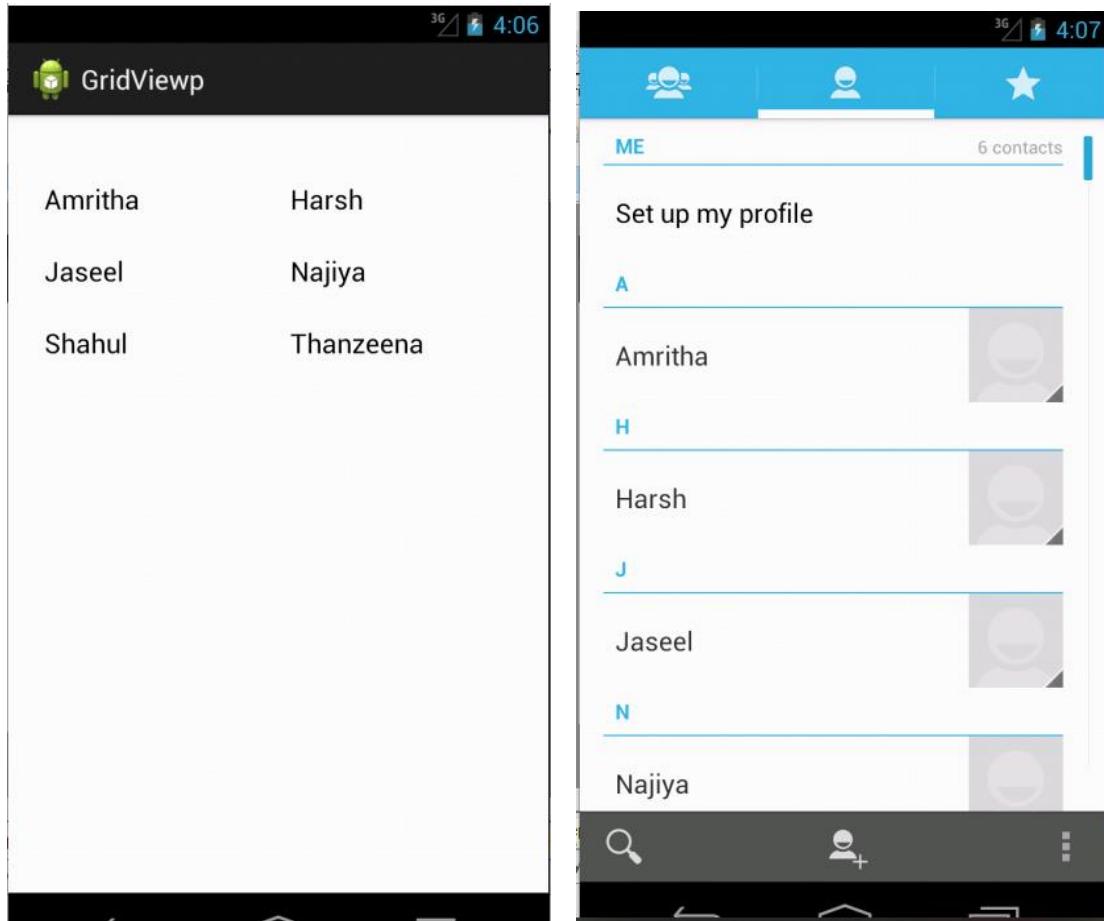
        gv=(GridView)findViewById(R.id.gridView1);
        gv.setNumColumns(2);

        Cursor c=managedQuery(Contacts.People.CONTENT_URI, null, null, null,
        Contacts.People.NAME);
        String[] cols=new String[] {Contacts.People.NAME};
        int [] views=new int[]{android.R.id.text1};

        SimpleCursorAdapter ad=new SimpleCursorAdapter(this,
        android.R.layout.simple_list_item_1, c, cols, views);
        gv.setAdapter(ad);
    }

}
```

OUTPUT



PROGRAM 12

Write a program to display Images from local drive of the computer.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.image.MainActivity" >

    <ImageView
        android:id="@+id/imageView1"
        android:layout_width="300dp"
        android:layout_height="300dp"
        android:src="@drawable/abc_ab_share_pack_holo_light" />

    <Button
        android:id="@+id/button1"
        android:text="@string/b1" />

    <Button
        android:id="@+id/button2"
        android:text="@string/b2" />

    <Button
        android:id="@+id/button3"
        android:text="@string/b3" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.image;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
```

```
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.ImageView;

public class MainActivity extends ActionBarActivity implements
OnClickListener {

    Button b1,b2,b3;
    ImageView im;

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

        b1=(Button)findViewById(R.id.button1);
        b2=(Button)findViewById(R.id.button2);
        b3=(Button)findViewById(R.id.button3);
        im=(ImageView)findViewById(R.id.imageView1);
        b1.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {

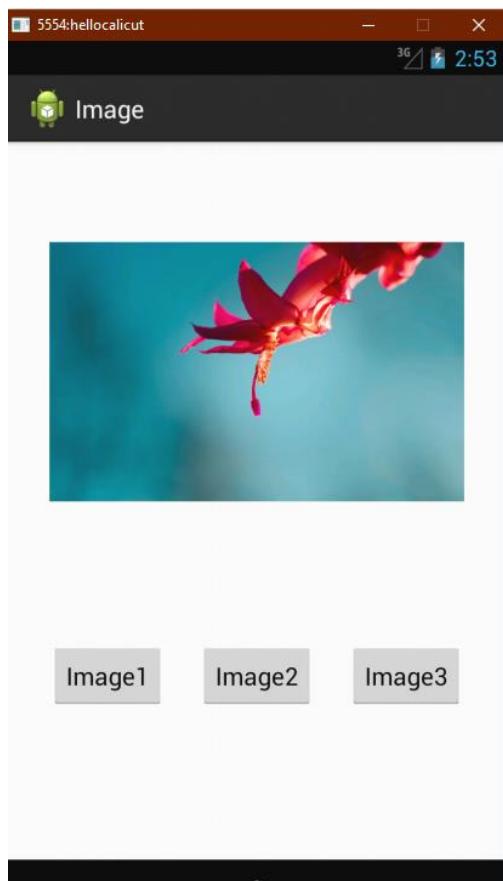
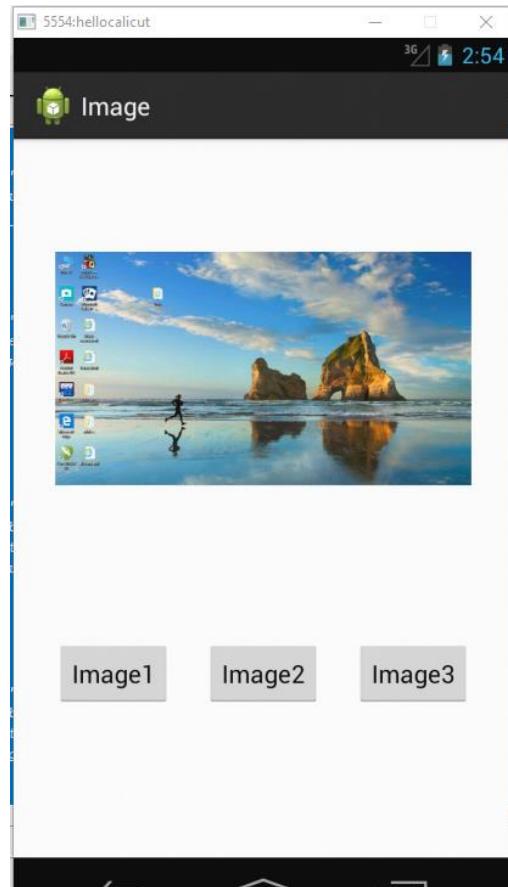
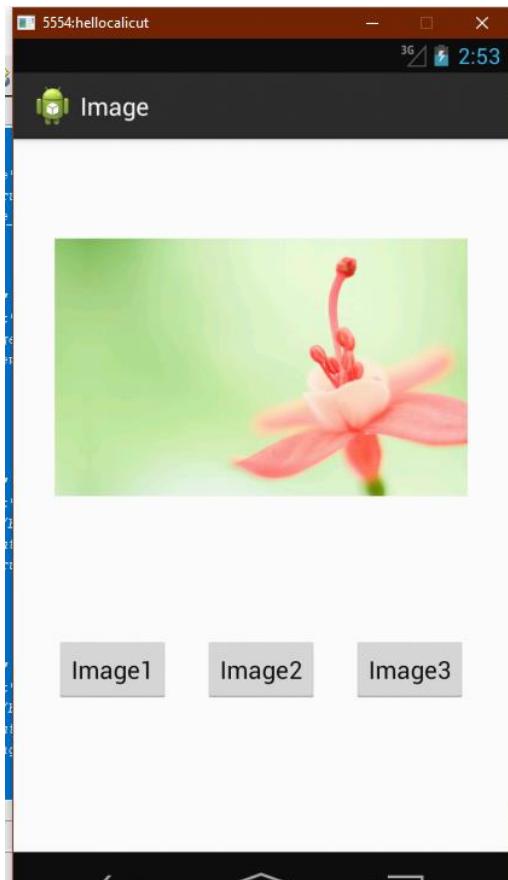
                im.setImageResource(R.drawable.image1);
            }
        });
        b2.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {

                im.setImageResource(R.drawable.img11);
            }
        });
        b3.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {
        im.setImageResource(R.drawable.img7);
    }
}
```

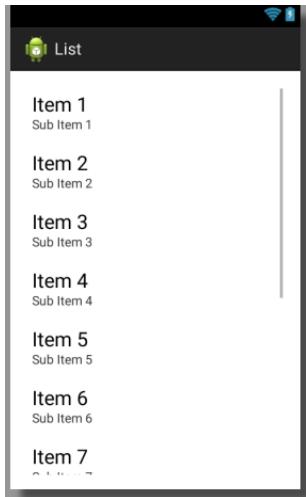
OUTPUT



PROGRAM 13

Write a program to Display the items in a List.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.list.MainActivity" >

    <ListView
        android:id="@+id/listView">
    </ListView>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.list;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.ListView;

public class MainActivity extends ActionBarActivity {

    ListView ls;

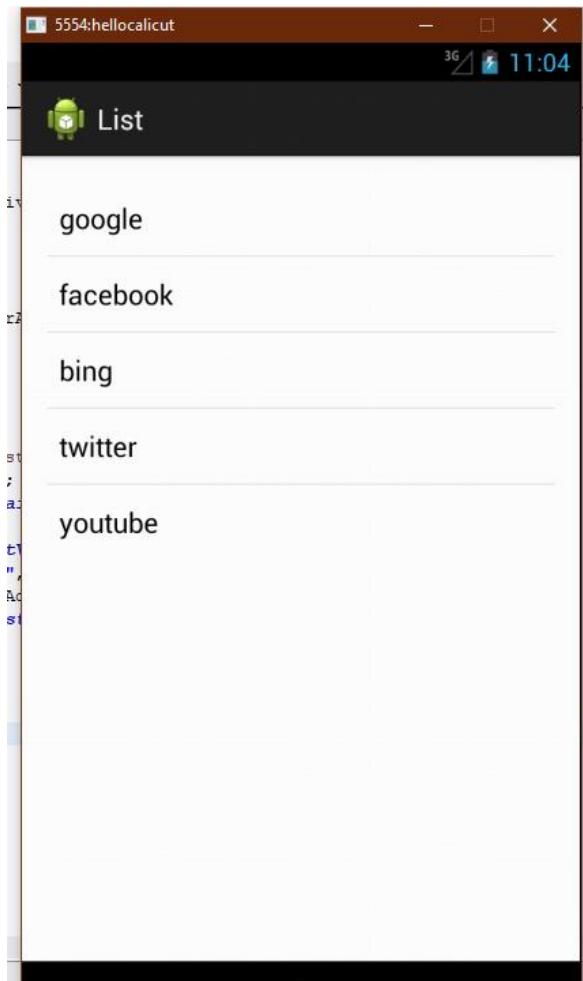
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
    setContentView(R.layout.activity_main);

    ls=(ListView) findViewById(R.id.listView1);
    String []
    title={"google","facebook","bing","twitter","youtube"};
    ArrayAdapter<String> adt=new ArrayAdapter<String>(MainActivity.this,
    android.R.layout.simple_list_item_1, android.R.id.text1,title);

    ls.setAdapter(adt);
}
}
```

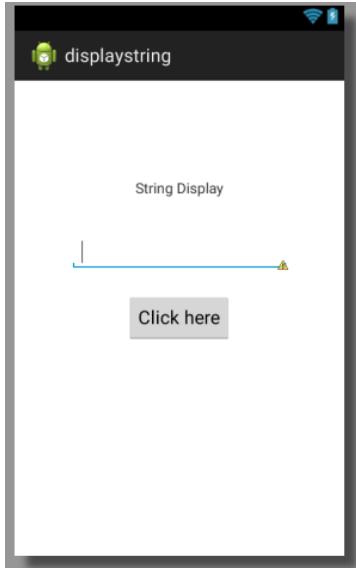
OUTPUT



PROGRAM 14

Write a program to Fetch data from an EditText and display it in a TextView.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.bca.displaystring.MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:text="@string/txtv" />

    <EditText
        android:id="@+id/editText1">
    </EditText>

    <TextView
        android:id="@+id/textView2"
        android:text="" />

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.bca.displaystring;
```

```

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends ActionBarActivity {

    Button btn;
    TextView tv1;
    EditText et1;

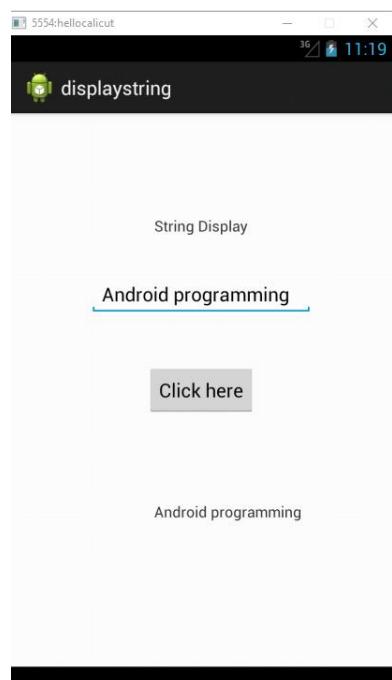
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        tv1=(TextView)findViewById(R.id.textView2);
        et1=(EditText)findViewById(R.id.editText1);
        btn=(Button)findViewById(R.id.button1);
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                tv1.setText(et1.getText().toString());
            }
        });
    }
}

```

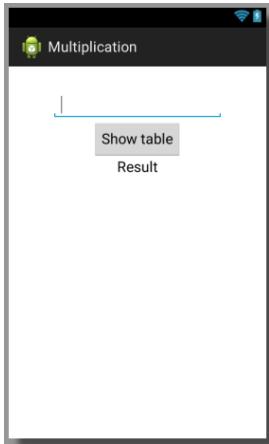
OUTPUT



PROGRAM 15

Write a program to display multiplication table of a given number.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.multiplication.MainActivity" >

    <EditText
        android:id="@+id/editText1"
        android:inputType="number" >

    </EditText>

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

    <TextView
        android:id="@+id/textView1"
        android:text="@string/txtv"/>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.multiplication;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
```

```

import android.widget.TextView;

public class MainActivity extends ActionBarActivity {

    EditText tx;
    TextView tv;
    Button btn;
    int ans=0;

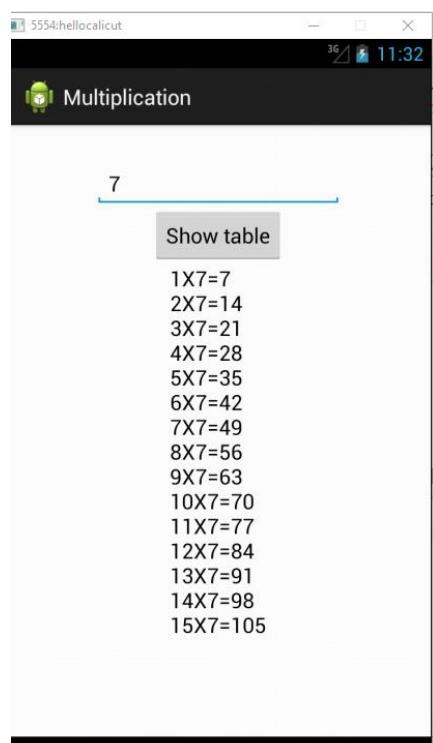
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tx=(EditText)findViewById(R.id.editText1);
        tv=(TextView)findViewById(R.id.textView1);
        btn=(Button)findViewById(R.id.button1);
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub

                StringBuffer buffer=new StringBuffer();
                String fs=tx.getText().toString();
                int n=Integer.parseInt(fs);
                for(int i=1;i<=15;i++) {
                    ans=(i*n);
                    buffer.append(i+"X"+n+"="+ans+"\n");
                    tv.setText(buffer);
                }
            }
        });
    }
}

```

OUTPUT



PROGRAM 16

Write a program to Get IP Address of the device.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.example.ip.MainActivity" >

    <TextView
        android:id="@+id/textView1"
        android:text="@string/ip" />

    <TextView
        android:id="@+id/textView2"
        android:text="" />

</RelativeLayout>
```

MANIFESTFILE

ipManifestfile

```
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
```

JAVA FILE

(MainActivity.java)

```
package com.example.ip;

import android.support.v7.app.ActionBarActivity;
import android.text.format.Formatter;
import android.net.wifi.WifiManager;
import android.os.Bundle;
import android.widget.TextView;

public class MainActivity extends ActionBarActivity {
    TextView tv;
    String ipa;

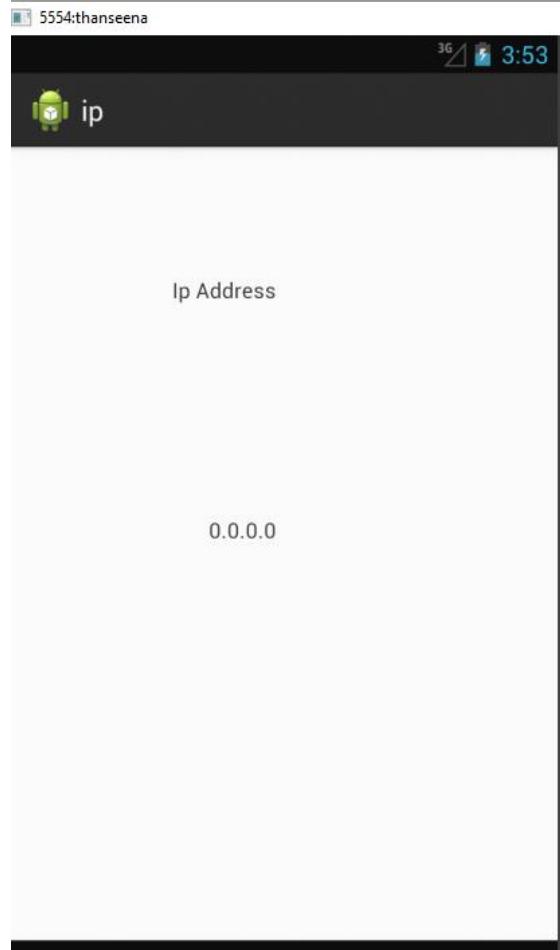
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        tv=(TextView)findViewById(R.id.textView2);
        WifiManager wm=(WifiManager) getSystemService(WIFI_SERVICE);

        ipa=Formatter.formatIpAddress(wm.getConnectionInfo().getIpAddress());
        tv.setText(ipa);

    }

}
```

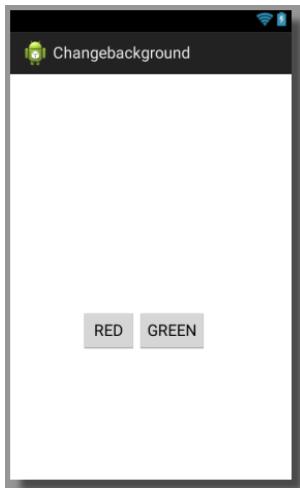
OUTPUT



PROGRAM 17

Write a program to change the Background colour of the Activity.

USER INTERFACE



XML FILE

(activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.changebackground.MainActivity" >

    <Button
        android:id="@+id/button2"
        android:text="@string/b2" />

    <Button
        android:id="@+id/button1"
        android:text="@string/b1" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.changebackground;

import android.support.v7.app.ActionBarActivity;
import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.RelativeLayout;
```

```
public class MainActivity extends ActionBarActivity {

    Button btn ,btn1;
    RelativeLayout rl;

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

        rl=(RelativeLayout)findViewById(R.id.rl1);
        btn=(Button)findViewById(R.id.button1);
        btn1=(Button)findViewById(R.id.button2);

        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {

                rl.setBackgroundColor(Color.RED);

            }
        });
        btn1.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub

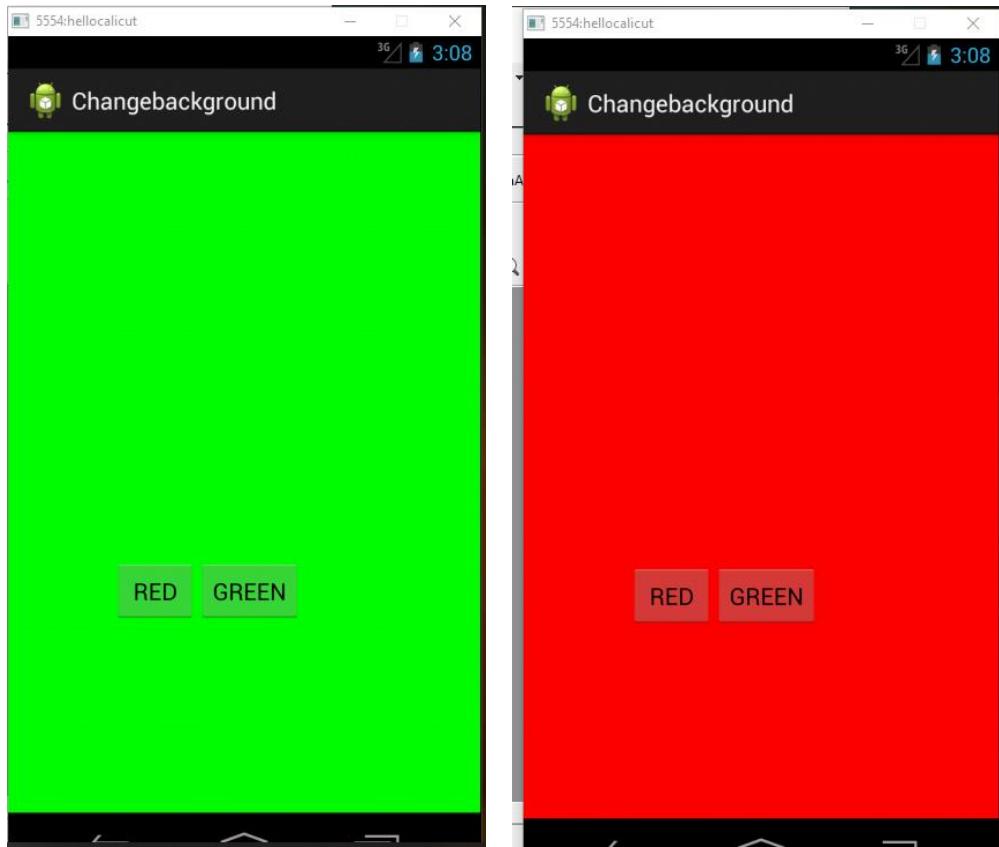
                rl.setBackgroundColor(Color.GREEN);

            }
        });

    }

}
```

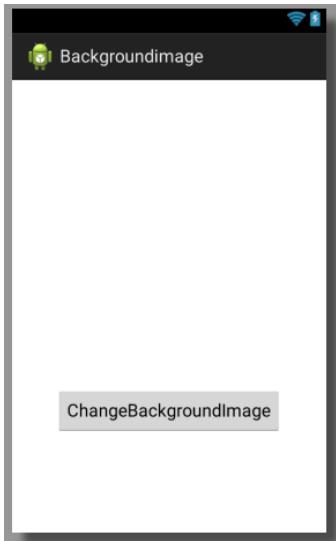
OUTPUT



PROGRAM 18

Write a program to Change the Background image.

USER INTERFACE



XML FILE (activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/rv"
    tools:context="com.cs.backgroundimage.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.backgroundimage;

import java.util.Random;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.RelativeLayout;

public class MainActivity extends ActionBarActivity {

    RelativeLayout r1;
    Button btn;
    int[] images;
```

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

    r1=(RelativeLayout)findViewById(R.id.rv);
    btn=(Button)findViewById(R.id.button1);

    images=new
int[]{R.drawable.img1,R.drawable.img7,R.drawable.screenshot};

    btn.setOnClickListener(new OnClickListener() {

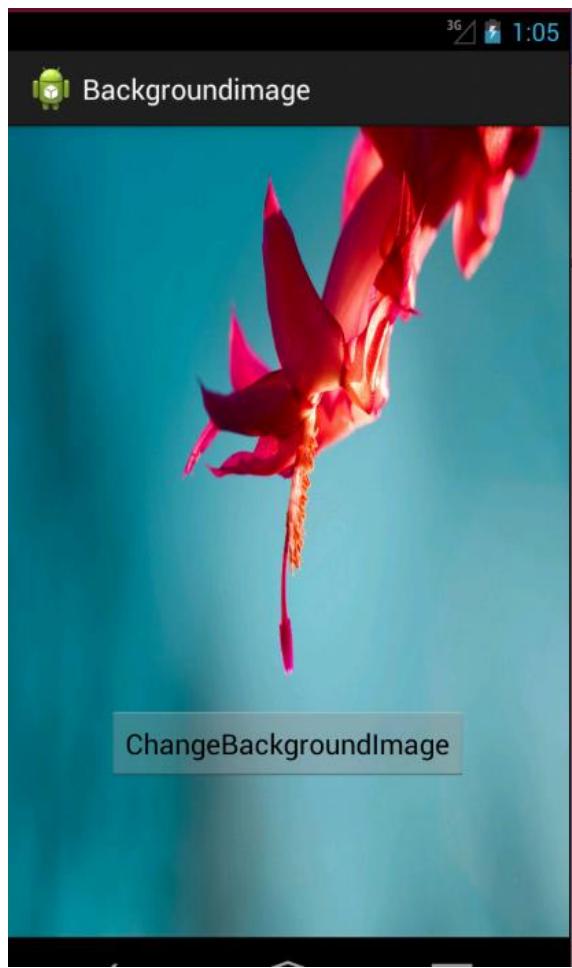
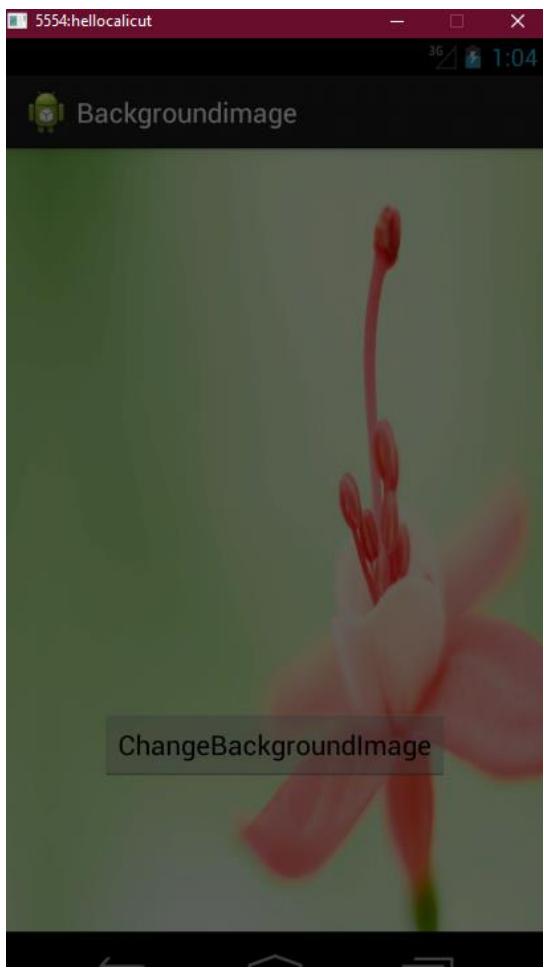
        @Override
        public void onClick(View v) {

            int arrayLength=images.length;
            Random r=new Random();
            int randnum=r.nextInt(arrayLength);
            r1.setBackgroundResource(images[randnum]);

        }
    });
}

}
```

OUTPUT

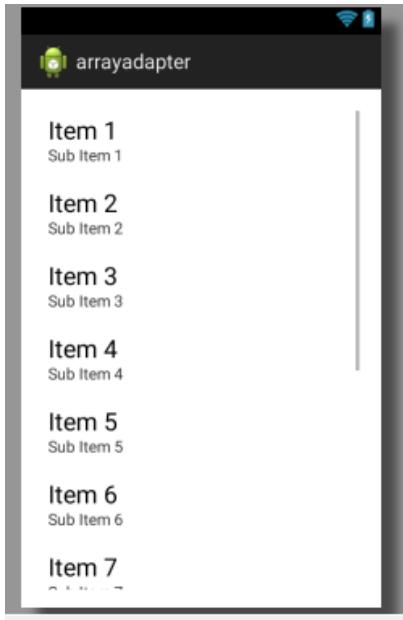




PROGRAM 19

Write a program using array adapter.

USER INTERFACE



XML FILE (activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.arrayadapter.MainActivity" >

    <ListView
        android:id="@+id/listView1">

    </ListView>

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.arrayadapter;

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

import android.view.View;

import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
```

```
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {
    ListView lst;
    String[]
months={"January","Feb","March","April","May","June","July","August","September","October","November","December"};
```

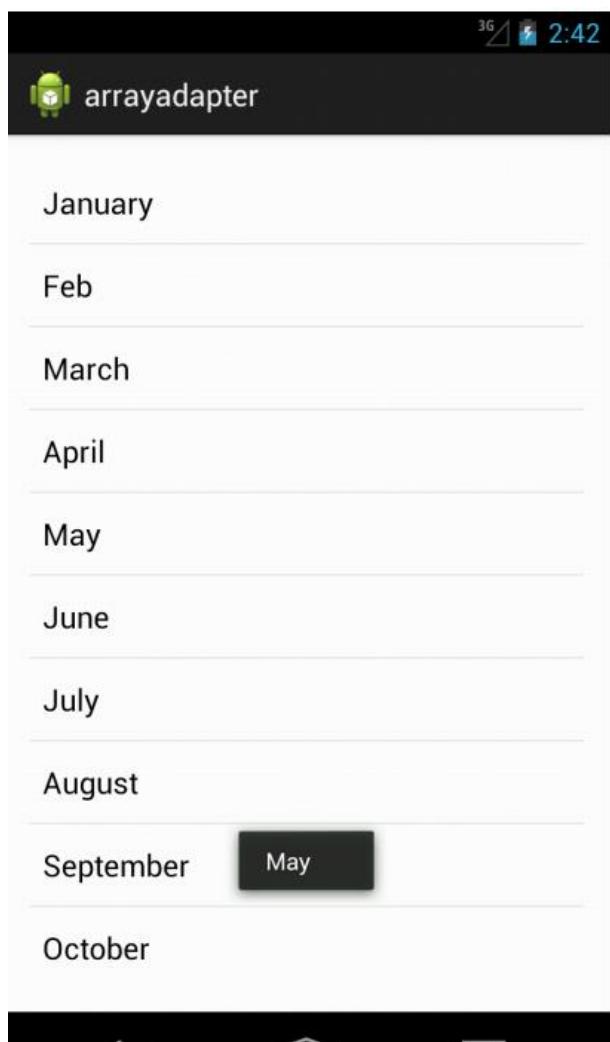


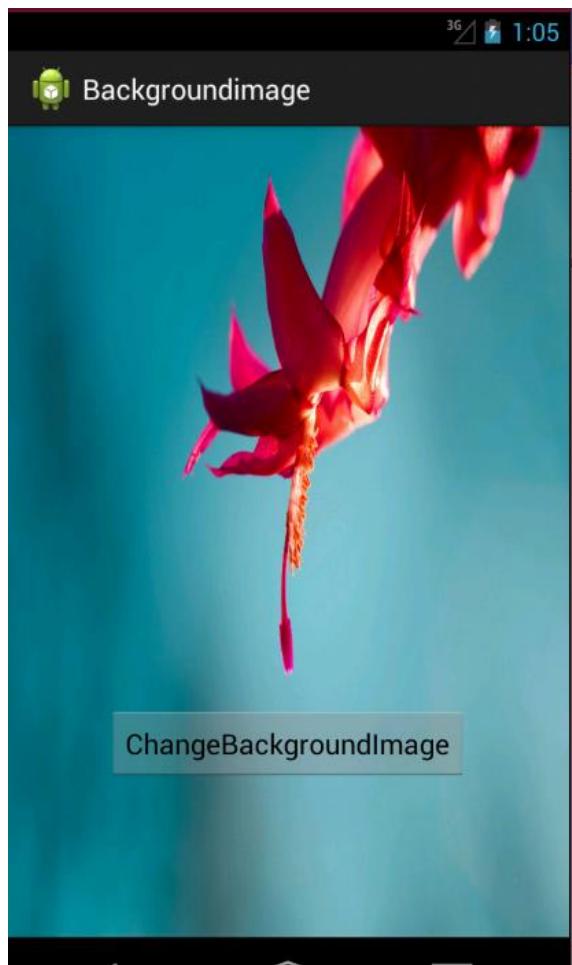
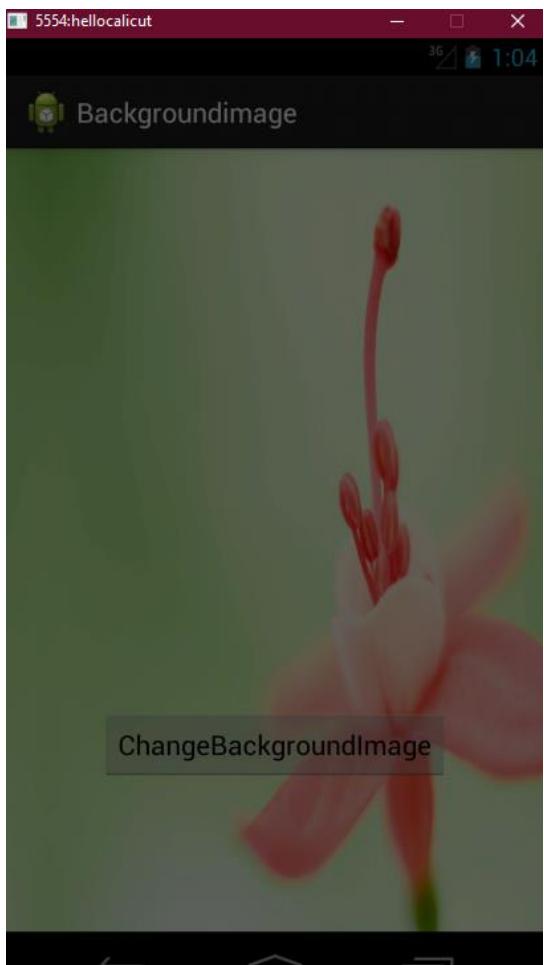
```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        lst=(ListView)findViewById(R.id.listView1);

        ArrayAdapter<String> aap=new
        ArrayAdapter<String>(this,android.R.layout.simple_list_item_1,months);
        lst.setAdapter(aap);
        lst.setOnItemClickListener(new OnItemClickListener() {

            @Override
            public void onItemClick(AdapterView<?> arg0, View arg1, int arg2,
                    long arg3) {
                // TODO Auto-generated method stub
                TextView tv=(TextView) arg1;
                Toast.makeText(MainActivity.this,tv.getText()+"",Toast.LENGTH_LONG).show();
            }
        });
    }
}
```

OUTPUT







PROGRAM 20

Write a program to start another activity from your own activity using intent.

USER INTERFACE 1(activity_main)



USER INTERFACE 2(activity_second)



XML FILE

activity_main.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.intend.MainActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/btn" />

</RelativeLayout>
```

activity_second.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.cs.intend.SecondActivity" >

    <Button
        android:id="@+id/button1"
        android:text="@string/btn1" />

</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.cs.intend;

import android.support.v7.app.ActionBarActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

public class MainActivity extends ActionBarActivity {

    Button bn;

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

        bn=(Button)findViewById(R.id.button1);
        bn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub
                Intent i = new Intent(MainActivity.this,
SecondActivity.class);
                startActivity(i);
            }
        });
    }
}
```

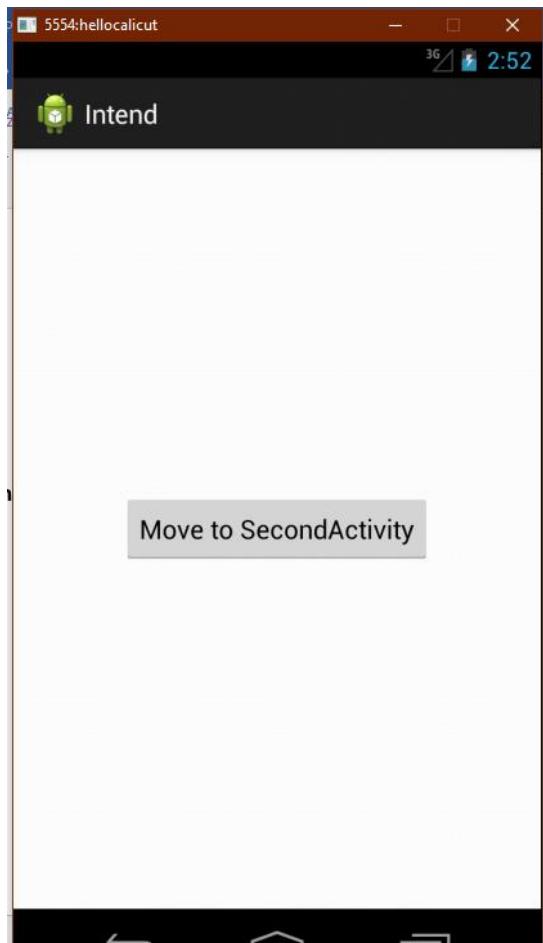
```
    } );  
}
```

```
}
```

SecondActivity.java

```
package com.cs.intend;  
  
import android.support.v7.app.ActionBarActivity;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.view.View.OnClickListener;  
import android.widget.Button;  
  
public class SecondActivity extends ActionBarActivity {  
  
    Button bn;  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_second);  
  
        bn=(Button)findViewById(R.id.button1);  
        bn.setOnClickListener(new OnClickListener() {  
  
            @Override  
            public void onClick(View v) {  
                // TODO Auto-generated method stub  
                Intent i = new Intent(SecondActivity.this,  
MainActivity.class);  
                startActivity(i);  
            }  
        });  
    }  
}
```

OUTPUT 1



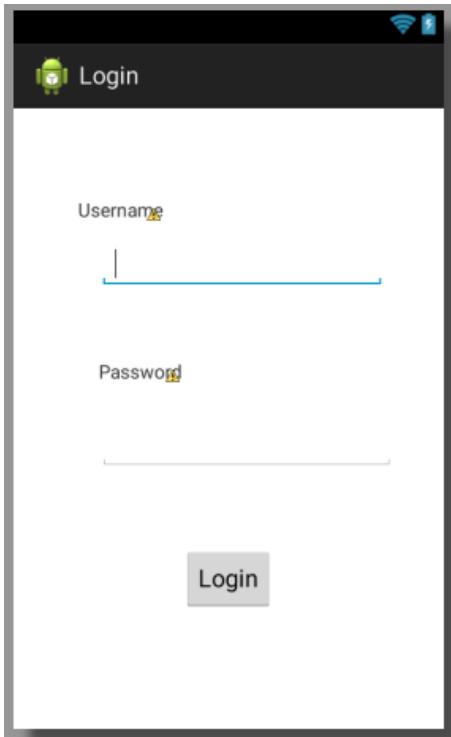
OUTPUT 2



PROGRAM 21

Write a program For Log in using username and password.

USER INTERFACE



XML FILE (activity_main.xml)

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    tools:context="com.am.login.MainActivity" >

    <EditText
        android:id="@+id/editText1"
        android:inputType="textPersonName" >
    </EditText>

    <EditText
        android:id="@+id/editText2"
        android:inputType="textPassword" />

    <Button
        android:id="@+id/button1"
        android:text="@string/b1" />

    <TextView
        android:id="@+id/textView2"
        android:text="Password" />

    <TextView
        android:id="@+id/textView1"
        android:text="Username" />
</RelativeLayout>
```

JAVA FILE

(MainActivity.java)

```
package com.am.login;

import android.support.v7.app.ActionBarActivity;
import android.os.Bundle;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends ActionBarActivity {

    EditText ed1,ed2;
    Button b1;

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

        ed1=(EditText)findViewById(R.id.editText1);
        ed2=(EditText)findViewById(R.id.editText2);
        b1=(Button)findViewById(R.id.button1);

        b1.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View v) {
                // TODO Auto-generated method stub
                if(ed1.getText().length()>0 && ed2.getText().length()>0){
                    String msg="Username:"+ed1.getText().toString()+
                               "Password:"+ed2.getText().toString();
                    Toast.makeText(MainActivity.this, msg, Toast.LENGTH_LONG).show();
                }
            }
        });

        else{
            String msg="username and password are not blank";
            Toast.makeText(MainActivity.this, msg, Toast.LENGTH_LONG).show();
        }
    }
}
```

```
    } );  
}  
  
}
```

OUTPUT

