

Android Programming

Practical programs

Hello World Program (Write a program to Toast Hello World)

Xml File

```
<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginLeft="52dp"
        android:layout_marginTop="61dp"
        android:text="SHOW" />

</RelativeLayout>
```

Java File

```
package com.andoubleos.myprogram;

import android.os.Bundle;
import android.app.Activity;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.Toast;

public class MainActivity extends Activity {
    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 arg0) {
                // TODO Auto-generated method stub
                Toast.makeText(MainActivity.this, "Hello World",
                Toast.LENGTH_LONG).show();
            }
        });
    }
}
```

```
}
```

Addition of two Numbers (Write a program to add two numbers)

Xml File

```
<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >
```

```
<TextView
    android:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="97dp"
    android:text="Addition"
    android:textAppearance="?android:attr/textAppearanceMedium" />
```

```
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentLeft="true"
    android:layout_below="@+id/textView1"
    android:layout_marginLeft="20dp"
    android:layout_marginTop="43dp"
    android:text="Number One"
    android:textAppearance="?android:attr/textAppearanceMedium" />
```

```
<EditText
    android:id="@+id/txtNumber1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBottom="@+id/textView2"
    android:layout_alignRight="@+id/textView1"
    android:ems="2"
    android:inputType="number" >
```

```
</EditText>

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/textView2"
    android:layout_below="@+id/textView2"
    android:layout_marginTop="47dp"
    android:text="Number Two"
    android:textAppearance="?android:attr/textAppearanceMedium" />
```

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

```

        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView3"
        android:layout_alignRight="@+id/textView3"
        android:layout_below="@+id/textView3"
        android:layout_marginTop="46dp"
        android:text="Add" />

<EditText
    android:id="@+id/txtNumber2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/btnAdd"
    android:layout_alignLeft="@+id/txtNumber1"
    android:ems="2"
    android:inputType="number" />

<TextView
    android:id="@+id/txtResult"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignRight="@+id/txtNumber2"
    android:layout_alignTop="@+id/btnAdd"
    android:textAppearance="?android:attr/textAppearanceMedium" />

</RelativeLayout>

```

Java File

```

package com.example.twosum;

import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
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 Activity {

    EditText firstNumber;
    EditText secondNumber;
    TextView addResult;
    Button btnAdd;

    double num1, num2, sum;

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

        firstNumber = (EditText)findViewById(R.id.txtNumber1);
        secondNumber = (EditText)findViewById(R.id.txtNumber2);
        addResult = (TextView)findViewById(R.id.txtResult);
        btnAdd = (Button)findViewById(R.id.btnAdd);

        btnAdd.setOnClickListener(new OnClickListener() {

            public void onClick(View v) {
                num1 = Double.parseDouble(firstNumber.getText().toString());

```

```

        num2 = Double.parseDouble(secondNumber.getText().toString());
        sum = num1 + num2;
        addResult.setText(Double.toString(sum));
    }
});
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}
}
}

```

Alert Box (Write a program to Display an alert box with OK and Cancel)

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="146dp"
        android:text="SHOW" />

</RelativeLayout>

```

Java File

```

package com.andoubleos.alertbox;

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

public class MainActivity extends Activity implements OnClickListener {
    Button btn;

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

```

```

        setContentView(R.layout.activity_main);

        btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);
    }

    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        AlertDialog.Builder bl= new AlertDialog.Builder(MainActivity.this);
        bl.setIcon(R.drawable.ic_launcher);
        bl.setTitle("Sample Alert Box");
        bl.setMessage("Hello, Goodmorning");

        bl.setPositiveButton("OK", new DialogInterface.OnClickListener() {

            @Override
            public void onClick(DialogInterface arg0, int arg1) {
                // TODO Auto-generated method stub
                Toast.makeText(MainActivity.this, "You Clicked OK",
Toast.LENGTH_LONG).show();
            }
        });

        bl.setNegativeButton("Cancel", new DialogInterface.OnClickListener()
{

            @Override
            public void onClick(DialogInterface arg0, int arg1) {
                // TODO Auto-generated method stub
                Toast.makeText(MainActivity.this, "You Clicked Cancel",
Toast.LENGTH_LONG).show();
            }
        });

        AlertDialog dl = bl.create();
        dl.show();
    }
}

```

Menu Program (Write a Program to create menu with three menu items)

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

</RelativeLayout>

```

Java File

```

package com.andoubleos.menuprgm;

import android.net.Uri;
import android.os.Bundle;

```

```

import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.Toast;

public class MainActivity extends Activity {

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

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.main, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        // TODO Auto-generated method stub
        int id = item.getItemId();

        if (id == R.id.copyItem){
            Toast.makeText(MainActivity.this, "You Clicked Copy Menu Item",
500).show();
        }
        else if (id == R.id.cutItem){
            Toast.makeText(MainActivity.this, "You Clicked Cut Menu
Item", Toast.LENGTH_LONG).show();
        }
        else if (id == R.id.copyItem){
            Toast.makeText(MainActivity.this, "You Clicked Paste Menu Item",
500).show();
        }
        else if (id == R.id.ggle){
            Intent i = new Intent(Intent.ACTION_VIEW);
            i.setData(Uri.parse("http://www.google.com"));
            startActivity(i);
        }
        return super.onOptionsItemSelected(item);
    }
}

```

Radio Button (Write a Program to Select gender using radio button)

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <RadioGroup

```

```

        android:id="@+id/radioGroup1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="80dp"
        android:layout_marginTop="76dp" >

        <RadioButton
            android:id="@+id/radio0"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:checked="true"
            android:text="Male" />

        <RadioButton
            android:id="@+id/radio1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Female" />

        <RadioButton
            android:id="@+id/radio2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Other" />
    </RadioGroup>

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/radioGroup1"
        android:layout_alignParentBottom="true"
        android:layout_marginBottom="110dp"
        android:text="SHOW" />

</RelativeLayout>

```

Java File

```

package com.example.radio;

import android.os.Bundle;
import android.app.Activity;
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 Activity {
    Button btn;
    RadioGroup rdg;

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

```

```

btn=(Button) findViewById(R.id.button1);
rdg=(RadioGroup) findViewById(R.id.radioGroup1);

btn.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        int selectId = rdg.getCheckedRadioButtonId();
        RadioButton rdb = (RadioButton) findViewById(selectId);
        Toast.makeText(MainActivity.this,
rdb.getText(),500).show();
    }
});
}
}

```

Spinner (Write a Program to Spin the four items).

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Spinner
        android:id="@+id/spinner1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginTop="24dp" />

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/spinner1"
        android:layout_alignParentBottom="true"
        android:layout_marginBottom="120dp"
        android:layout_marginLeft="60dp"
        android:text="Large Text"
        android:textAppearance="?android:attr/textAppearanceLarge" />

</RelativeLayout>

```

Java File

```

package com.andoubleos.spinnercontrol;

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

```



```

import android.widget.Spinner;
import android.widget.TextView;

public class MainActivity extends Activity implements OnItemSelectedListener {
    Spinner sp;
    TextView tv;

    String [] items = {"Keyboard", "Mouse", "Printer", "Speaker"} ;

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

        sp=(Spinner) findViewById(R.id.spinner1);
        tv=(TextView) findViewById(R.id.textView1);

        sp.setOnItemSelectedListener(this);

        ArrayAdapter<String> adt = new ArrayAdapter<String>(this,
            android.R.layout.simple_list_item_1,items);
        sp.setAdapter(adt);
    }

    @Override
    public void onItemSelected(AdapterView<?> arg0, View arg1, int arg2,
        long arg3) {
        // TODO Auto-generated method stub
        tv.setText(items[arg2]);
    }
}

```

Check box (Write a Program to check the items listed)

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <CheckBox
        android:id="@+id/checkbox1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="18dp"
        android:layout_marginTop="30dp"
        android:text="Android" />

    <CheckBox
        android:id="@+id/checkbox2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/checkbox1"
        android:layout_below="@+id/checkbox1"

```

```

        android:text="Java" />

<CheckBox
    android:id="@+id/checkBox3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/checkBox2"
    android:layout_below="@+id/checkBox2"
    android:text="PHP" />

<CheckBox
    android:id="@+id/checkBox4"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/checkBox3"
    android:layout_below="@+id/checkBox3"
    android:text="Shell Script" />

<Button
    android:id="@+id/button1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/checkBox4"
    android:layout_below="@+id/checkBox4"
    android:layout_marginLeft="58dp"
    android:layout_marginTop="67dp"
    android:text="SHOW" />

</RelativeLayout>

```

Java File

```

package com.andoubleos.mycheckbox;

import android.os.Bundle;
import android.app.Activity;
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 implements OnClickListener {
    CheckBox chk1,chk2,chk3,chk4;
    Button btn;

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

        chk1=(CheckBox) findViewById(R.id.checkBox1);
        chk2=(CheckBox) findViewById(R.id.checkBox2);
        chk3=(CheckBox) findViewById(R.id.checkBox3);
        chk4=(CheckBox) findViewById(R.id.checkBox4);
        btn=(Button) findViewById(R.id.button1);

        btn.setOnClickListener(this);
    }

    @Override

```

```

    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        StringBuffer strb = new StringBuffer();
        strb.append("Android: ").append(chk1.isChecked());
        strb.append("\nJava: ").append(chk2.isChecked());
        strb.append("\nPHP: ").append(chk3.isChecked());
        strb.append("\nShell Script: ").append(chk4.isChecked());

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

```

Image View (Write a Program to Display images from local drive of the computer)

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Button
        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBottom="@+id/button2"
        android:layout_alignParentRight="true"
        android:text="Image 3" />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/button1"
        android:layout_alignBottom="@+id/button1"
        android:layout_toLeftOf="@+id/button3"
        android:text="Image 2" />

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_toLeftOf="@+id/button2"
        android:text="Image 1" />

    <ImageView
        android:id="@+id/imageView1"
        android:layout_width="300dp"
        android:layout_height="300dp"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"

```

```

        android:layout_marginLeft="14dp"
        android:layout_marginTop="40dp"
    />

```

```
</RelativeLayout>
```

Java File

```

package com.andoubleos.imgview;

import android.os.Bundle;
import android.app.Activity;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.ImageView;

public class MainActivity extends Activity implements OnClickListener {
    ImageView img;
    Button b1,b2,b3;

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

        img=(ImageView) findViewById(R.id.imageView1);
        b1=(Button) findViewById(R.id.button1);
        b2=(Button) findViewById(R.id.button2);
        b3=(Button) findViewById(R.id.button3);

        b1.setOnClickListener(this);
        b2.setOnClickListener(this);
        b3.setOnClickListener(this);
    }

    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        switch (arg0.getId()) {
            case R.id.button1:
                img.setBackgroundResource(R.drawable.image1);
                break;
            case R.id.button2:
                img.setBackgroundResource(R.drawable.image2);
                break;
            case R.id.button3:
                img.setBackgroundResource(R.drawable.image3);
                break;

            default:
                break;
        }
    }
}

```

List View (Write a Program to Display the items in a list)

Xml File

```
<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <ListView
        android:id="@+id/listView1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true" >

</ListView>

</RelativeLayout>
```

Java File

```
package com.andoubleos.mylistview;

import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
import android.widget.ArrayAdapter;
import android.widget.ListView;

public class MainActivity extends Activity {
    ListView lv;

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

        lv=(ListView) findViewById(R.id.listView1);
        String title[] = {"Google","Facebook", "Twitter", "YouTube"};
        ArrayAdapter<String> adt = new ArrayAdapter<String>(MainActivity.this,
            android.R.layout.simple_list_item_1,android.R.id.text1,title) ;
        lv.setAdapter(adt);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.main, menu);
        return true;
    }
}
```

Fetch data from an EditText and display it in a TextView

Xml File

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/relativeLayout1"
    android:layout_width="match_parent"
```

```

        android:layout_height="match_parent"
        android:paddingBottom="@dimen/activity_vertical_margin"
        android:paddingLeft="@dimen/activity_horizontal_margin"
        android:paddingRight="@dimen/activity_horizontal_margin"
        android:paddingTop="@dimen/activity_vertical_margin"
        tools:context=".MainActivity" >

        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_alignParentTop="true"
            android:layout_marginLeft="36dp"
            android:layout_marginTop="50dp"
            android:text="Enter Any String"
            android:textAppearance="?android:attr/textAppearanceLarge" />

        <EditText
            android:id="@+id/editText1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignRight="@+id/button1"
            android:layout_below="@+id/textView1"
            android:layout_marginTop="18dp"
            android:ems="10"
            android:inputType="textPersonName" >

            <requestFocus />
        </EditText>

        <Button
            android:id="@+id/button1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@+id/editText1"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="38dp"
            android:text="SHOW" />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentBottom="true"
            android:layout_alignRight="@+id/textView1"
            android:layout_marginBottom="53dp"
            android:textAppearance="?android:attr/textAppearanceLarge" />

    </RelativeLayout>

```

Java File

```
package com.example.abc;
```

```

import android.os.Bundle;
import android.app.Activity;
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 Activity {
    Button btn;
    TextView tv;
    EditText txt1;

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

        btn=(Button) findViewById(R.id.button1);
        tv=(Button) findViewById(R.id.textView2);
        txt1=(EditText) findViewById(R.id.editText1);

        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View arg0) {
                // TODO Auto-generated method stub
                tv.setText(txt1.getText().toString());
            }
        });
    }
}

```

Write a program to display multiplication table of a given number

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <EditText
        android:id="@+id/editText1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginTop="16dp"
        android:ems="10"
        android:inputType="number" />

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/editText1"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="20dp"
        android:text="Button" />

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```

        android:layout_alignParentBottom="true"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/button1"
        android:layout_marginTop="30dp"
        android:text="Large Text"
        android:textAppearance="?android:attr/textAppearanceLarge" />
</RelativeLayout>

```

Java File

```

package com.andoubleos.multiplicationtable;

import android.os.Bundle;
import android.app.Activity;
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 Activity {

    EditText txt;
    Button btn;
    TextView txtv;
    int ans = 1;

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

        txt=(EditText) findViewById(R.id.editText1);
        btn=(Button) findViewById(R.id.button1);
        txtv=(TextView) findViewById(R.id.textView1);

        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View arg0) {
                // TODO Auto-generated method stub
                StringBuffer temp= new StringBuffer();
                String num = txt.getText().toString();
                int n= Integer.parseInt(num);

                for(int i =1; i<=14; i++){
                    ans=(i*n);
                    temp.append(i + " X " + n + " = " + ans + "\n");
                    txtv.setText(temp);
                }
            }
        });
    }
}

```

Write a program to Get IP Address of the device

Xml File

```

<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:paddingBottom="@dimen/activity_vertical_margin"
android:paddingLeft="@dimen/activity_horizontal_margin"
android:paddingRight="@dimen/activity_horizontal_margin"
android:paddingTop="@dimen/activity_vertical_margin"
tools:context=".MainActivity" >

```

```

<TextView
    android:id="@+id/textView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_centerHorizontal="true"
    android:layout_marginBottom="156dp"
    android:text="Large Text"
    android:textAppearance="?android:attr/textAppearanceLarge" />

```

```
</RelativeLayout>
```

Java File

```
package com.andoubleos.ipaddress;
```

```

import android.net.wifi.WifiManager;
import android.os.Bundle;
import android.app.Activity;
import android.text.format.Formatter;
import android.widget.TextView;

```

```

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

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

        tv=(TextView) findViewById(R.id.textView1);
        WifiManager wm = (WifiManager) getSystemService(WIFI_SERVICE);
        ipa=Formatter.formatIpAddress(wm.getConnectionInfo().getIpAddress());
        tv.setText(ipa);
    }
}

```

Write a program to Change the Background colour of the Activity

Xml File

```

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/r1"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Button

```

```

        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBottom="@+id/button1"
        android:layout_toRightOf="@+id/button1"
        android:text="CHANGE COLOR" />
    </RelativeLayout>

```

Java File

```

package com.gems.pqr;

import android.os.Bundle;
import android.app.Activity;
import android.graphics.Color;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.RelativeLayout;
public class MainActivity extends Activity {
    Button b1;
    RelativeLayout rel;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1=(Button) findViewById(R.id.button1);

        rel=(RelativeLayout) findViewById(R.id.r1);
        b1.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View arg0) {
                // TODO Auto-generated method stub
                rel.setBackgroundColor(Color.BLUE);
            }
        });
    }
}

```

Write a program to Change the Background image

Xml File

```

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/rView"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```

        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="47dp"
        android:text="CHANGE" />

```

```
</RelativeLayout>
```

Java File

```

package com.andoubleos.background;

import java.util.Random;

import android.os.Bundle;
import android.app.Activity;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

public class MainActivity extends Activity {

    Button btn;
    View screenView;
    int[] images;

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

        btn =(Button) findViewById(R.id.button1);
        screenView = findViewById(R.id.rView);

        images = new int[] {
            R.drawable.image1,R.drawable.image2,R.drawable.image3,R.drawable.image4,R.drawable.image6};
        btn.setOnClickListener(new OnClickListener() {

            @Override
            public void onClick(View arg0) {
                // TODO Auto-generated method stub
                int aryLength = images.length;
                Random rand = new Random();
                int randNum = rand.nextInt(aryLength);
                screenView.setBackgroundResource(images[randNum]);
            }
        });
    }
}

```

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

First Xml File

```

<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:background="#0000ff"
    android:paddingBottom="@dimen/activity_vertical_margin"

```

```

android:paddingLeft="@dimen/activity_horizontal_margin"
android:paddingRight="@dimen/activity_horizontal_margin"
android:paddingTop="@dimen/activity_vertical_margin"
tools:context=".MainActivity" >

```

```

<Button
    android:id="@+id/button1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_centerVertical="true"
    android:text="Move To Next Activity" />

```

```

</RelativeLayout>

```

Second Xml File

```

<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:background="#ff0000"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".SecondActivity" >

```

```

<Button
    android:id="@+id/button1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentLeft="true"
    android:layout_marginBottom="63dp"
    android:layout_marginLeft="41dp"
    android:text="Move To First Activity" />

```

```

</RelativeLayout>

```

First Java File

```

package com.anddoubleos.usingintent;

```

```

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

```

```

public class MainActivity extends Activity implements OnClickListener {
    Button btn;

```

```

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

        btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);
    }
}

```

```

    }

    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        Intent i = new Intent(MainActivity.this, SecondActivity.class);
        startActivity(i);
    }
}

```

Second Java File

```

package com.andoubleos.usingintent;

import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;

public class SecondActivity extends Activity implements OnClickListener {
    Button btn;

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

        btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);
    }

    @Override
    public void onClick(View arg0) {
        // TODO Auto-generated method stub
        Intent i = new Intent(SecondActivity.this, MainActivity.class);
        startActivity(i);
    }
}

```