

## Android practical list

### 1. Custom styles

code:

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:gravity="center"
    android:layout_height="match_parent"
    tools:context="com.example.custom_styles.MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        style="@style/dgstyle"/>

</LinearLayout>
```

Styles.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar">
        <item name="colorPrimary">@color/colorprimary</item>
        <item name="colorPrimaryDark">@color/colorprimarydark</item>
        <item name="colorAccent">@color/coloraccent</item>
    </style>
    <style name="dgstyle">
        <item name="android:layout_width">fill_parent</item>
        <item name="android:layout_height">wrap_content</item>
        <item name="android:typeface">monospace</item>
        <item name="android:background">#260068</item>
        <item name="android:textSize">12pt</item>
        <item name="android:textColor">#ffffff</item>/>
    </style>
</resources>
```

**output:**



## 2. Food order app

Code :

MainActivity.java

```
package com.example.my_app;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    EditText edtName, edtNumber;
    RadioButton radioV, radioNV, RadioBut,r1,r2;
    CheckBox checkP, checkB, checkS;
    Button butOrder;
    RadioGroup radioG;
    TextView OrderDetails2, OrderDetails;
    int total = 0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        edtName = findViewById(R.id.edtName);
        edtNumber = findViewById(R.id.edtNumber);
        r1= findViewById(R.id.r1);
        r2= findViewById(R.id.radioNV);
        radioV = findViewById(R.id.radioV);
        radioNV = findViewById(R.id.radioNV);
        radioG = findViewById(R.id.radioG);
        checkP = (CheckBox)findViewById(R.id.checkP);
        checkB = (CheckBox)findViewById(R.id.checkB);
        checkS = (CheckBox)findViewById(R.id.checkS);
        butOrder = (Button)findViewById(R.id.butOrder);
        butOrder.setOnClickListener(this);
    }
    @Override
    public void onClick(View v) {
        if (v == butOrder){
            int SelectedID = radioG.getCheckedRadioButtonId();
            RadioBut = (RadioButton)findViewById(SelectedID);
            String R = RadioBut.getText().toString();
```

```
if (R.equals("Veg")){
    if (checkP.isChecked()){
        total = total + 100;
    }
    if (checkB.isChecked()){
        total = total + 100;
    }
    if (checkS.isChecked()){
        total = total + 50;
    }
}
if (R.equals("Non-Veg")){
    if (checkP.isChecked()){
        total = total + 200;
    }
    if (checkB.isChecked()){
        total = total + 150;
    }
    if (checkS.isChecked()){
        total = total + 100;
    }
}
if (R.equals("Jain")){
    if (checkP.isChecked()){
        total = total + 200;
    }
    if (checkB.isChecked()){
        total = total + 150;
    }
    if (checkS.isChecked()){
        total = total + 100;
    }
}
if (R.equals("Non-Jain")){
    if (checkP.isChecked()){
        total = total + 200;
    }
    if (checkB.isChecked()){
        total = total + 150;
    }
    if (checkS.isChecked()){
        total = total + 100;
    }
}

String Summary = "Name: " +edtName.getText()+ "\nPhone: "
+edtNumber.getText()+ "\nType: " +RadioBut.getText().toString()+ "\nTotal: " +total;
total = 0;
Toast.makeText(this,Summary, Toast.LENGTH_LONG).show();
```

```
        checkP.setChecked(false);
        checkB.setChecked(false);
        checkS.setChecked(false);
    }
}
```

### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.my_app.MainActivity">
    <LinearLayout
        android:orientation="vertical"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:weightSum="1"
        android:layout_alignParentBottom="true"
        android:layout_alignParentEnd="true"
        android:layout_marginEnd="12dp"
        android:layout_marginBottom="23dp">

        <EditText
            android:layout_width="316dp"
            android:layout_height="wrap_content"
            android:id="@+id/edtName"
            android:hint="Name"
            android:layout_weight="0.15" />

        <EditText
            android:layout_width="315dp"
            android:layout_height="wrap_content"
            android:id="@+id/edtNumber"
            android:hint="Mob."
            android:layout_weight="0.13" />

        <RadioGroup
            android:id="@+id/radioG"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:weightSum="1">

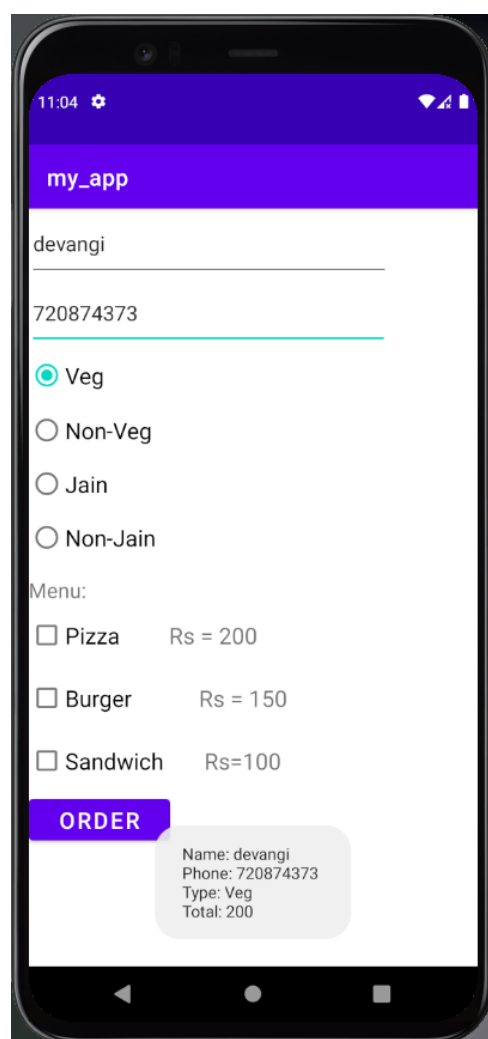
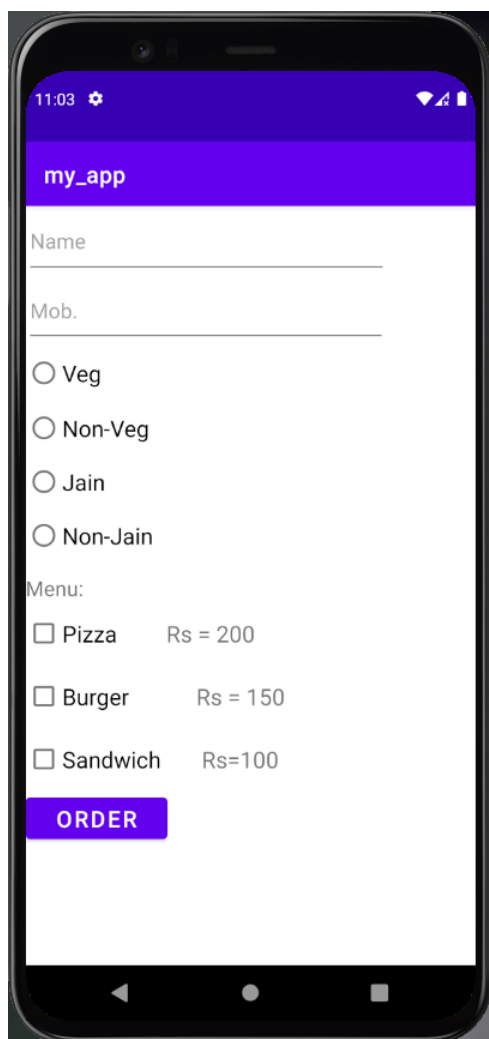
            <RadioButton
                android:id="@+id/radioV"
                android:layout_width="wrap_content"
                android:layout_height="49dp"
                android:layout_weight="0.24"
```

```
        android:checked="false"
        android:text="Veg"
        android:textSize="20dp" />
    <RadioButton
        android:id="@+id/r1"
        android:layout_width="wrap_content"
        android:layout_height="47dp"
        android:layout_weight="0.11"
        android:checked="false"
        android:text="Non-Veg"
        android:textSize="20dp" />
    <RadioButton
        android:id="@+id/radioNV"
        android:layout_width="wrap_content"
        android:layout_height="47dp"
        android:layout_weight="0.11"
        android:checked="false"
        android:text="Jain"
        android:textSize="20dp" />
    <RadioButton
        android:id="@+id/radioNVv"
        android:layout_width="wrap_content"
        android:layout_height="47dp"
        android:layout_weight="0.11"
        android:checked="false"
        android:text="Non-Jain"
        android:textSize="20dp" />
</RadioGroup>
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textAppearance="?android:attr/textAppearanceMedium"
    android:text="Menu:"
    android:id="@+id/textView"
    android:paddingTop="10dp" />
<LinearLayout
    android:orientation="horizontal"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:weightSum="1">
    <CheckBox
        android:layout_width="wrap_content"
        android:layout_height="55dp"
        android:text="Pizza "
        android:id="@+id/checkP"
        android:checked="false"
        android:layout_weight="0.09"
        android:textSize="20dp" />
    <TextView
```

```
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:paddingLeft="20dp"
        android:text="Rs = 200"
        android:textSize="20dp" />
    </LinearLayout>
    <LinearLayout
        android:orientation="horizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:weightSum="1">
        <CheckBox
            android:layout_width="wrap_content"
            android:layout_height="55dp"
            android:text="Burger"
            android:id="@+id/checkB"
            android:checked="false"
            android:layout_weight="0.20"
            android:textSize="20dp" />
        <TextView
            android:id="@+id/textView3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:paddingLeft="20dp"
            android:text="Rs = 150"
            android:textSize="20dp" />

    </LinearLayout>
    <LinearLayout
        android:orientation="horizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:weightSum="1">
        <CheckBox
            android:layout_width="wrap_content"
            android:layout_height="55dp"
            android:text="Sandwich"
            android:id="@+id/checkS"
            android:checked="false"
            android:layout_weight="0.09"
            android:textSize="20dp" />
        <TextView
            android:id="@+id/textView4"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:paddingLeft="20dp"
```

```
        android:text="Rs=100"
        android:textSize="20dp" />
    </LinearLayout>
    <Button
        android:layout_width="124dp"
        android:layout_height="wrap_content"
        android:text="Order"
        android:id="@+id/butOrder"
        android:textSize="20dp" />
    </LinearLayout>
</RelativeLayout>
```

**Output:**



### 3. Autocomplete text

#### Code:

#### MainActivity.java

```
package com.example.new_app;

import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.AutoCompleteTextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    String[] countryNameList = {"India", "China", "Australia", "New Zealand", "England", "Pakistan"};

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        //initiate an auto complete text view
        AutoCompleteTextView simpleAutoCompleteTextView = (AutoCompleteTextView)
        findViewById(R.id.simpleAutoCompleteTextView);
        ArrayAdapter adapter = new ArrayAdapter(this, android.R.layout.simple_list_item_1,
        countryNameList);

        simpleAutoCompleteTextView.setAdapter(adapter);
        simpleAutoCompleteTextView.setThreshold(1); //start searching from 1 character
        simpleAutoCompleteTextView.setAdapter(adapter); //set the adapter for displaying
        country name list
    }

}
```

#### 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:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    tools:context="com.example.new_app.MainActivity">
```

```
<AutoCompleteTextView
    android:id="@+id/simpleAutoCompleteTextView"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:background="#000"
    android:hint="Enter Country Name Here"
    android:padding="15dp"
    android:textColor="@color/white"
    android:textColorHint="#fff"
    android:textStyle="bold|italic" />
```

```
</LinearLayout>
```

### Output:



#### 4. Intent Call a Number

Code :

**activity\_main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.call2.MainActivity">

    <EditText
        android:id="@+id/editText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="104dp"
        android:ems="10"
        android:hint="Number"
        android:inputType="textPersonName"
        tools:layout_editor_absoluteX="84dp"
        tools:layout_editor_absoluteY="55dp" />

    <Button
        android:id="@+id/button"
        android:layout_width="150dp"
        android:layout_height="100dp"
        android:layout_below="@+id/editText"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="53dp"

        android:background="@android:drawable/presence_online"
        android:text="Call"
        tools:layout_editor_absoluteX="148dp"
        tools:layout_editor_absoluteY="137dp" />

</RelativeLayout>
```

**MainActivity.java**

```
package com.example.call2;

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

```
import android.widget.EditText;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

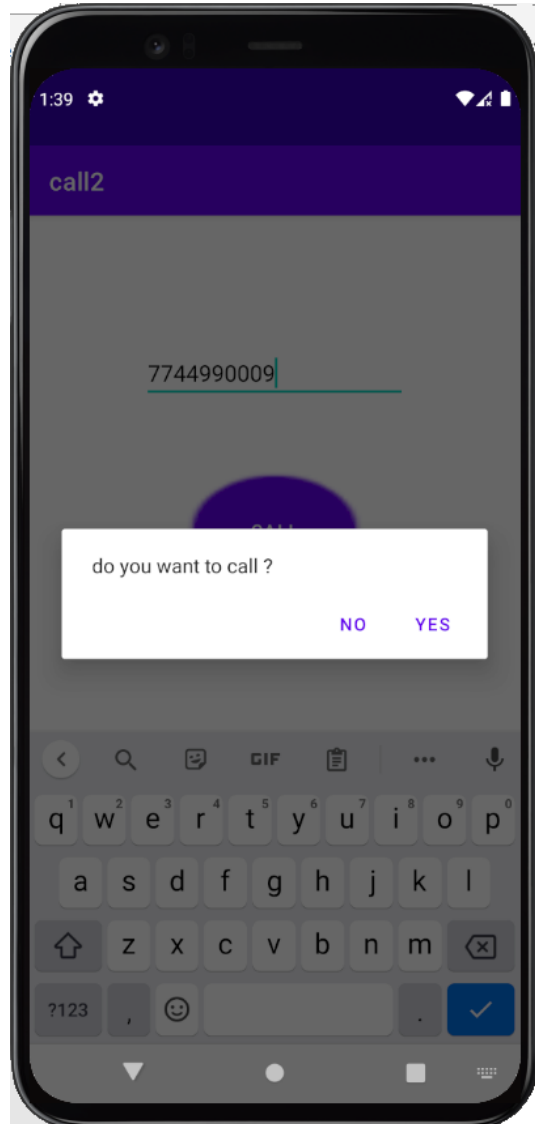
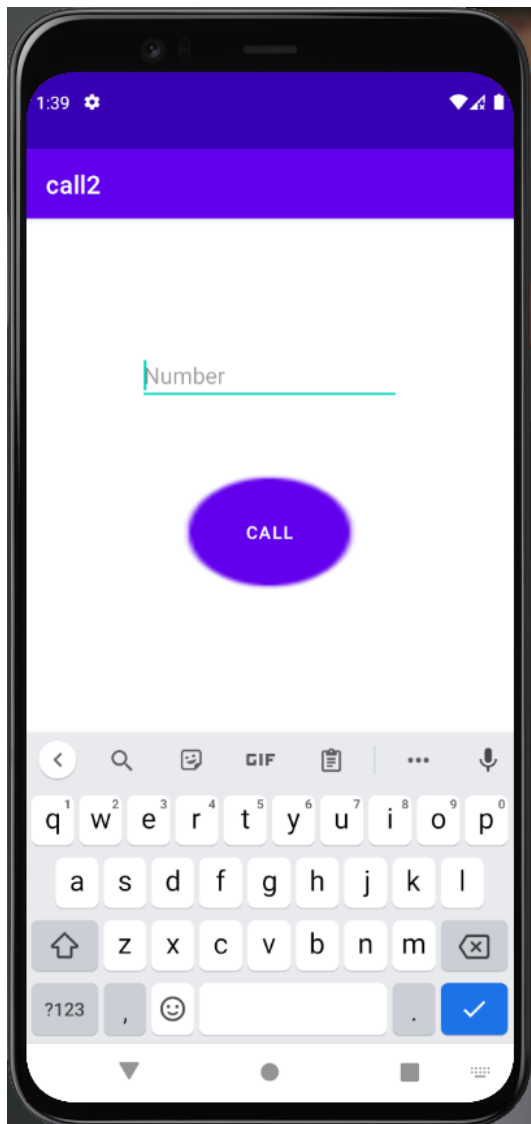
public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Button b1=(Button)findViewById(R.id.button);
        final EditText e1=(EditText)findViewById(R.id.editText);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override

            public void onClick(View v) {
                AlertDialog.Builder a=new AlertDialog.Builder(MainActivity.this);
                a.setMessage("do you want to call ?");
                a.setPositiveButton("Yes", new DialogInterface.OnClickListener(){
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        Intent i=new Intent(Intent.ACTION_DIAL,Uri.parse("tel:91"+e1.getText()));
                        startActivity(i);}

                });
                a.setNegativeButton("no",new DialogInterface.OnClickListener(){
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        dialog.cancel();
                    }
                });
                a.create().show();
            }
        });
    }
}
```

**output :**



## 5. Common gesture

### Code:

#### MainActivity.java

```
package com.example.common_gesture;

import android.os.Bundle;
import android.view.GestureDetector;
import android.view.MotionEvent;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.view.GestureDetectorCompat;

public class MainActivity extends AppCompatActivity implements
GestureDetector.OnGestureListener{
    private TextView t1;
    private GestureDetectorCompat gDetector;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        t1 = (TextView)findViewById(R.id.t1);
        this.gDetector = new GestureDetectorCompat(this,this);
    }

    @Override
    public boolean onTouchEvent(MotionEvent event) {

        this.gDetector.onTouchEvent(event);
        return super.onTouchEvent(event);
    }

    @Override
    public boolean onDown(MotionEvent event) {
        t1.setText ("onDown");
        return true;
    }

    @Override
    public void onShowPress(MotionEvent motionEvent) {
        t1.setText("onShowPress");
    }

    @Override
    public boolean onFling(MotionEvent event1, MotionEvent event2, float velocityX, float
velocity){
        t1.setText("onFling");
        return true;
    }
}
```

```
}

@Override
public void onLongPress(MotionEvent event) {t1.setText("onLongPres");}

@Override
public boolean onScroll(MotionEvent e1, MotionEvent e2, float distanceX, float
distanceY){
    t1.setText("onScroll");
    return true;
}

@Override
public boolean onSingleTapUp(MotionEvent event){
    t1.setText("onSingleTapUp");
    return true;
}
}
```

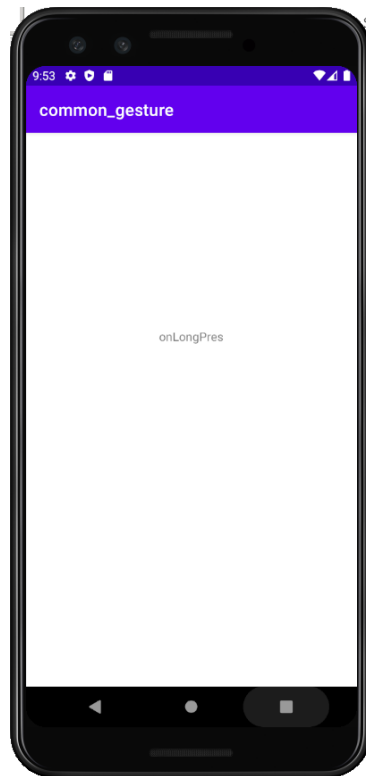
### activity\_main.xml

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

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:id="@+id/t1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_weight="0.433"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="232dp"/>

</RelativeLayout>
```

**Output:**





## 6. Device Camera:

### Code:

#### MainActivity.java

```
package com.example.camera1;

import android.app.Activity;
import android.content.Intent;
import android.graphics.Bitmap;
import android.os.Bundle;
import android.view.Menu;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;

public class MainActivity extends Activity {
    private static final int CAMERA_REQUEST = 1888;
    ImageView imageView;
    public void onCreate(Bundle savedInstanceState) {

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

        imageView = (ImageView) this.findViewById(R.id.imageView1);
        Button photoButton = (Button) this.findViewById(R.id.button1);

        photoButton.setOnClickListener(new View.OnClickListener() {

            @Override
            public void onClick(View v) {
                Intent cameraIntent = new
Intent(android.provider.MediaStore.ACTION_IMAGE_CAPTURE);
                startActivityForResult(cameraIntent, CAMERA_REQUEST);
            }
        });
    }

    protected void onActivityResult(int requestCode, int resultCode, Intent data) {
        if (requestCode == CAMERA_REQUEST) {
            Bitmap photo = (Bitmap) data.getExtras().get("data");
            imageView.setImageBitmap(photo);
        }
    }

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

```
}  
  
}
```

### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout  
    xmlns:tools="http://schemas.android.com/tools"  
    xmlns:app="http://schemas.android.com/apk/res-auto"  
    xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    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:text="Take a Photo" >  
    </Button>  
  
    <ImageView  
        android:id="@+id/imageView1"  
        android:layout_width="fill_parent"  
        android:layout_height="fill_parent"  
        android:layout_above="@+id/button1"  
        android:layout_alignParentTop="true"  
        android:src="@drawable/ic_launcher" >  
    </ImageView>  
</RelativeLayout>
```

### Output :

