***Slip1***

***Q1 Create a simple application which shows the Life cycle of android***

***MainActivity.java***

**package** com.example.actitvitylifecycle;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.os.Bundle;  
**import** android.util.Log;  
  
**public class** MainActivity**extends** AppCompatActivity{  
String tag=**"Events"**;  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
Log.*d*(tag, **"In on create Event"**);  
 }  
**public void** onStart(){  
**super**.onStart();  
Log.*d*(tag,**"In onStart() event"**);  
 }  
  
**public void** onRestart(){  
**super**.onRestart();  
Log.*d*(tag,**"InonRestart() event"**);  
 }  
  
**public void** onResume(){  
**super**.onResume();  
Log.*d*(tag,**"InonResume() event"**);  
 }  
  
**public void** onPause(){  
**super**.onPause();  
Log.*d*(tag,**"InonPause() event"**);  
 }  
  
  
**public void** onStop(){  
**super**.onStop();  
Log.*d*(tag,**"InonStop() event"**);  
 }  
  
  
**public void** onDestroy(){  
**super**.onDestroy();  
Log.*d*(tag,**"InonDestroy() event"**);  
 }  
  
}

***Q2 Create an android application that demostrate DatePicker and DatePickerDialog***

***Xml file***

<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="500dp"  
 android:layout\_gravity="center"  
 android:text="Select Date"/>  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="24sp"  
 android:layout\_gravity="center"/>  
</LinearLayout>

**Java file**

package com.example.slip1datepickerapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.app.DatePickerDialog;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.DatePicker;  
import android.widget.TextView;  
  
import java.util.Calendar;  
  
public class MainActivity extends AppCompatActivity {  
 private Button button;  
 private TextView textView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 button = findViewById(R.id.*button*);  
 textView = findViewById(R.id.*textView*);  
  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 DatePickerDialog datePickerDialog = new DatePickerDialog(MainActivity.this,  
 new DatePickerDialog.OnDateSetListener() {  
 @Override  
 public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {  
 String date = dayOfMonth + "/" + (month + 1) + "/" + year;  
 textView.setText(date);  
 }  
 }, Calendar.*getInstance*().get(Calendar.*YEAR*), Calendar.*getInstance*().get(Calendar.*MONTH*), Calendar.*getInstance*().get(Calendar.*DAY\_OF\_MONTH*));  
 datePickerDialog.show();  
 }  
 });  
  
  
  
  
  
 }  
}

***slip2***

***Q1.Create an android application which reads a positive number from the user and***

***display its factorial value in another activity***

***xml file 1***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/edit\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 android:layout\_marginTop="300dp"  
 android:hint="Enter any number"/>  
  
 <Button  
 android:id="@+id/btn\_calculate"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="40dp"  
 android:layout\_marginEnd="38dp"  
 android:layout\_marginTop="30dp"  
 android:text="Calculate Factorial"/>  
  
  
  
  
</LinearLayout>

**Java file 1**

package com.example.slip2factorialapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 EditText editText;  
 Button btnCalculate;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 editText=findViewById(R.id.*edit\_text*);  
 btnCalculate=findViewById(R.id.*btn\_calculate*);  
 btnCalculate.setOnClickListener(new View.OnClickListener() {  
 Bundle bundle=new Bundle();  
 @Override  
 public void onClick(View view) {  
 int user,fact=1 , i;  
 user= Integer.*parseInt*(editText.getText().toString());  
  
  
  
 for(i=1;i<=user;i++)  
 {  
 fact=fact\*i;  
  
 }  
 bundle.putInt("key",fact);  
 Intent intent =new Intent(MainActivity.this,FactorialActivity.class);  
 intent.putExtras(bundle);  
  
 startActivity(intent);  
  
  
  
 }  
 });  
 }  
}

**xml file2**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:gravity="center"  
 tools:context=".FactorialActivity">  
 <TextView  
 android:id="@+id/text\_view\_result"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="center"  
 android:text=""/>  
  
</LinearLayout>

**Java file2**

package com.example.slip2factorialapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class FactorialActivity extends AppCompatActivity {  
 TextView textView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_factorial*);  
 textView=(TextView) findViewById(R.id.*text\_view\_result*);  
 Intent intent= getIntent();  
 Bundle bundle= intent.getExtras();  
 int val =bundle.getInt("key");  
 String str =String.*valueOf*(val);  
  
  
 textView.setText(str);  
  
  
  
 }  
}

**slip3**

**Q1. Create an Android application that will change color of the collage name on click Name on Click of Push Button and change the font style of text view using xml**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".ClickButton">  
  
 <TextView  
 android:id="@+id/collage\_name"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="S.M Joshi Collage"  
 android:textSize="30dp"  
 android:textStyle="bold"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:textAlignment="center"  
 android:layout\_marginTop="100dp"/>  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
 <Button  
 android:id="@+id/change\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:text="push"  
 android:textSize="28dp"  
 android:textStyle="bold"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginTop="30dp"  
 android:layout\_marginRight="30dp" />  
</LinearLayout>  
</LinearLayout>

**Java file**

package com.example.firstandroidproject;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.graphics.Color;  
import android.graphics.Typeface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
  
public class ClickButton extends AppCompatActivity {  
 TextView collage\_name; *//variable define here TextView id name here declaration of variable* Button change\_button ; *// define variable i.e means id name of view .ie Button id name must define here* @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_click\_button*);  
 collage\_name=(TextView) findViewById(R.id.*collage\_name*);*// here we initialize above variable by typecast collage\_name is TextView* change\_button=(Button) findViewById(R.id.*change\_button*);  
 *// here we applied click event on Button and change name i.e change name text  
 // so put setListener for all* change\_button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v){  
 *//here change collage\_name ka text will change* collage\_name.setTextColor(Color.*RED*);  
 }  
  
 });  
  
 }  
}

**Q2.Crea an Android application Ap [p it reads the Student Detail (Name Surname, Class, Gender, Hobbies, Marks)display the all information in another activity in table format on click of submit button**

**Xml file1**

**<LinearLayout>**

<**EditText**android:id**="@+id/txtname"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Name"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtsurname"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter SurName"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtclass"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Classname"**android:layout\_marginTop**="20dp"**/>  
  
  
<**EditText**android:id**="@+id/txtGender"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Gender"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txthobbies"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Hobbies"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtmarks"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:inputType**="number"**android:hint**="Enter Marks"**android:layout\_marginTop**="20dp"**/>  
  
<**Button**android:id**="@+id/btnsubmit"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="50dp"**android:text**="Submit"**android:layout\_marginLeft**="50dp"**android:layout\_marginRight**="50dp"**/>

**</LinearLayout>**

**Java file 1**

**Public class** MainActivity**extends** AppCompatActivity{  
EditTexttxtname,txtsurname,txtclass,txtGender,txthobbies,txtmarks;  
Button btnsubmit;  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
txtname=(EditText) findViewById(R.id.*txtname*);  
txtsurname=(EditText) findViewById(R.id.*txtsurname*);  
txtclass **public** =(EditText)findViewById(R.id.*txtclass*);  
txtGender=(EditText) findViewById(R.id.*txtGender*);  
txthobbies=(EditText) findViewById(R.id.*txthobbies*);  
txtmarks=(EditText) findViewById(R.id.*txtmarks*);  
  
btnsubmit=(Button) findViewById(R.id.*btnsubmit*);  
  
btnsubmit.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
String name=txtname.getText().toString().trim();  
String surname=txtsurname.getText().toString().trim();  
String classes=txtclass.getText().toString().trim();  
String Gender=txtGender.getText().toString().trim();  
String hobbies=txthobbies.getText().toString().trim();  
String marks=txtmarks.getText().toString().trim();*//fetching data*Bundle bundle=**new** Bundle();*//bundle import........... variable careate  
 //bundle variable use...*bundle.putString(**"name"**,name);*//key and where stroed name*bundle.putString(**"surname"**,surname);  
bundle.putString(**"classes"**,classes);  
bundle.putString(**"Gender"**,Gender);  
bundle.putString(**"hobbies"**,hobbies);  
bundle.putString(**"marks"**,marks);  
  
*//new intent open karnahai*Intent intent=**new** Intent(MainActivity.**this**,MainActivity2.**class**);  
intent.putExtras(bundle);  
startActivity(intent);  
 }

});

}

}

**Xml file2**

**<TableLayout>**

<**TableRow**android:layout\_marginTop**="300dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
  
<**TextView**android:id**="@+id/txt\_name"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="30dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**android:textAlignment**="center"**/>  
  
<**TextView**android:id**="@+id/txt\_surname"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
  
<**TableRow**android:layout\_marginTop**="30dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
<**TextView**android:id**="@+id/txt\_classname"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
<**TextView**android:id**="@+id/txt\_Gender"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
  
<**TableRow**android:layout\_marginTop**="30dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
<**TextView**android:id**="@+id/txt\_hobbies"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
  
<**TextView**android:id**="@+id/txt\_marks"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
</**TableLayout**>

**Java file 2**

TextViewtxt\_name,txt\_surname,txt\_classname,txt\_Gender,txt\_hobbies,txt\_marks;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main2*);  
  
  
Bundle bundle=getIntent().getExtras();  
  
txt\_name= (TextView) findViewById(R.id.*txt\_name*);  
txt\_surname=(TextView) findViewById(R.id.*txt\_surname*);  
txt\_classname=(TextView) findViewById(R.id.*txt\_classname*);  
txt\_Gender=(TextView) findViewById(R.id.*txt\_Gender*);  
txt\_hobbies=(TextView) findViewById(R.id.*txt\_hobbies*);  
txt\_marks=(TextView) findViewById(R.id.*txt\_marks*);  
  
  
**if**( bundle != **null**)  
 {  
String name = bundle.getString(**"name"**);  
String surname = bundle.getString(**"surname"**);  
String classes = bundle.getString(**"classes"**);  
String Gender = bundle.getString(**"Gender"**);  
String hobbies = bundle.getString(**"hobbies"**);  
String marks = bundle.getString(**"marks"**);  
  
txt\_name.setText(name);  
txt\_surname.setText(surname);  
txt\_classname.setText(classes);  
txt\_Gender.setText(Gender);  
txt\_hobbies.setText(hobbies);  
txt\_marks.setText(marks);  
  
 }  
 }  
**}**

***SLIP NO 4***

***Q1) Create a Simple Application, that performs Arithmetic Operations. (Use constraint layout)***

**Xml file**

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:app**="http://schemas.android.com/apk/res-auto"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**tools:context**=".MainActivity"**>  
  
<**TextView**android:id**="@+id/textView"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="120dp"**android:text**="Arithmetic Operator"**android:textAlignment**="center"**android:textColor**="#F60101"**android:textSize**="40dp"**android:textStyle**="bold"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintHorizontal\_bias**="1.0"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintTop\_toTopOf**="parent"** />  
  
<**EditText**android:id**="@+id/fnum"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="16dp"**android:hint**="First Number"**android:inputType**="number"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintHorizontal\_bias**="1.0"**app:layout\_constraintTop\_toBottomOf**="@+id/textView"**/>  
  
<**EditText**android:id**="@+id/snum"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="16dp"**android:hint**="Second Number"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:inputType**="number"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintTop\_toBottomOf**="@+id/fnum"** />  
  
<**TextView**android:id**="@+id/res"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="36dp"**android:text**="RESULT"**android:textSize**="20dp"**android:textStyle**="bold"**app:layout\_constraintEnd\_toEndOf**="@+id/snum"**app:layout\_constraintHorizontal\_bias**="0.097"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintTop\_toBottomOf**="@+id/snum"** />  
  
  
<**Button**android:id**="@+id/btn1"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginStart**="48dp"**android:layout\_marginTop**="28dp"**android:text**="ADDITION"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintHorizontal\_bias**="0.097"**app:layout\_constraintTop\_toBottomOf**="@+id/res"** />  
  
<**Button**android:id**="@+id/btn2"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginStart**="236dp"**android:layout\_marginTop**="28dp"**android:text**="SUBSTRACTION"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintHorizontal\_bias**="0.097"**app:layout\_constraintTop\_toBottomOf**="@+id/res"** />  
  
<**Button**android:id**="@+id/btn3"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="100dp"**android:layout\_marginEnd**="232dp"**android:text**="MULTIPLICATION"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintHorizontal\_bias**="0.097"**app:layout\_constraintTop\_toBottomOf**="@+id/res"** />  
  
<**Button**android:id**="@+id/btn4"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="100dp"**android:layout\_marginEnd**="64dp"**android:text**="DIVISION"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintHorizontal\_bias**="0.097"**app:layout\_constraintTop\_toBottomOf**="@+id/res"** />  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Java file**

**public class** MainActivity**extends** AppCompatActivity{  
EditTextfnum;  
EditTextsnum;  
Button btn1;  
Button btn2;  
Button btn3;  
Button btn4;  
TextViewres;  
  
  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
btn1=(Button) findViewById(R.id.*btn1*);  
btn2=(Button) findViewById(R.id.*btn2*);  
btn3=(Button) findViewById(R.id.*btn3*);  
btn4=(Button) findViewById(R.id.*btn4*);  
fnum= (EditText)findViewById(R.id.*fnum*);  
snum=(EditText)findViewById(R.id.*snum*);  
res=(TextView)findViewById(R.id.*res*);  
  
  
btn1.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
**int** n1 = Integer.*parseInt*(fnum.getText().toString());  
**int** n2 = Integer.*parseInt*(snum.getText().toString());  
  
**int** result = n1+n2;  
  
res.setText(String.*valueOf*(result));  
  
 }  
 });  
  
  
btn2.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
**int** n1 = Integer.*parseInt*(fnum.getText().toString());  
**int** n2 = Integer.*parseInt*(snum.getText().toString());  
  
**int** result = n1-n2;  
  
res.setText(String.*valueOf*(result));  
  
 }  
 });  
  
btn3.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
**int** n1 = Integer.*parseInt*(fnum.getText().toString());  
**int** n2 = Integer.*parseInt*(snum.getText().toString());  
  
**int** result = n1\*n2;  
  
res.setText(String.*valueOf*(result));  
  
 }  
 });  
  
btn4.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
**int** n1 = Integer.*parseInt*(fnum.getText().toString());  
**int** n2 = Integer.*parseInt*(snum.getText().toString());  
  
**int** result = n1/n2;  
  
res.setText(String.*valueOf*(result));  
  
 }  
 });  
 }  
}

***Q2. Create an Android Application that sends the Notification on click of the button and displays the notification message on the second activity***.

**Xml file**

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:app**="http://schemas.android.com/apk/res-auto"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**tools:context**=".MainActivity"**>  
  
<**TextView**android:id**="@+id/textView"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="184dp"**android:text**="NOTIFICATION"**android:textAlignment**="center"**android:textSize**="20dp"**android:textStyle**="bold"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintHorizontal\_bias**="0.0"**app:layout\_constraintStart\_toStartOf**="parent"**app:layout\_constraintTop\_toTopOf**="parent"** />  
  
<**Button**android:id**="@+id/btn"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="280dp"**android:text**="NOTIFY"**android:textSize**="20dp"**android:textStyle**="bold"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**app:layout\_constraintHorizontal\_bias**="0.0"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintTop\_toBottomOf**="@+id/textView"**/>  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Java file**

**package** com.example.notification;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** androidx.core.app.ActivityCompat;  
**import** androidx.core.app.NotificationCompat;  
**import** androidx.core.app.NotificationManagerCompat;  
  
**import** android.app.Notification;  
**import** android.app.NotificationChannel;  
**import** android.app.NotificationManager;  
**import** android.app.PendingIntent;  
**import** android.content.Intent;  
**import** android.content.pm.PackageManager;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.os.Build;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
  
**public class** MainActivity**extends** AppCompatActivity**implements** View.OnClickListener{  
  
**final** String CHANNEL\_ID = **"Sanju\_Ki\_Pathshala"**;  
Button btn;  
NotificationManagerCompatnNotificationCompat;  
NotificationManagerCompatnNotificationManagerCompat;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
createNotificationChannel();  
  
btn= (Button) findViewById(R.id.*btn*);  
  
btn.setOnClickListener(**this**);  
nNotificationManagerCompat= NotificationManagerCompat.*from*(MainActivity.**this**);  
  
 }  
  
@Override  
**public void** onClick(View view) {  
createNotificationManagerCompat(getString(R.string.*app\_name*), getString(R.string.*title*), **1**);  
 }  
  
  
**private void** createNotificationManagerCompat(String title, String msg, **int** notificationId) {  
 title = **"Notification Done"**;  
msg = **"This is Done Notification"**;  
  
nNotificationManagerCompat.cancelAll();  
  
Bitmap bitmap= BitmapFactory.*decodeResource*(getResources(), R.drawable.*baseline\_notifications\_active\_24*);  
  
Intent intent= **new** Intent(MainActivity.**this**, Activity2.**class**);  
  
PendingIntentpendingIntent= PendingIntent.*getActivity*(**this**, **0**, intent, **0**);  
  
Notification notification= **new** NotificationCompat.Builder(**this**, CHANNEL\_ID)  
 .setSmallIcon(R.drawable.*baseline\_notifications\_active\_24*)  
 .setContentTitle(title)  
 .setContentText(msg)  
 .setPriority(NotificationCompat.*PRIORITY\_DEFAULT*)  
  
 .setContentIntent(pendingIntent)  
  
 .setAutoCancel(**true**)  
 .build();  
  
  
**if** (ActivityCompat.*checkSelfPermission*(**this**, android.Manifest.permission.*POST\_NOTIFICATIONS*) != PackageManager.*PERMISSION\_GRANTED*) {  
*// TODO: Consider calling  
// ActivityCompat#requestPermissions  
// here to request the missing permissions, and then overriding  
 // public void onRequestPermissionsResult(int requestCode, String[] permissions,  
 // int[] grantResults)  
 // to handle the case where the user grants the permission. See the documentation  
 // for ActivityCompat#requestPermissions for more details.***return**;  
 }  
nNotificationManagerCompat.notify(notificationId, notification);  
 }  
**private void** createNotificationChannel(){  
**if** (Build.VERSION.*SDK\_INT*>= Build.VERSION\_CODES.*P*){  
CharSequence name = **"Sanju\_Ki\_Pathshala"**;  
  
String desc= **"This is for VIP"**;  
  
**int** imp = NotificationManager.*IMPORTANCE\_DEFAULT*;  
  
NotificationChannel Channel = **new** NotificationChannel(CHANNEL\_ID,name,imp);  
  
Channel.setDescription(desc);  
  
NotificationManagernotificationManager= getSystemService(NotificationManager.**class**);  
notificationManager.createNotificationChannel(Channel);  
 }  
 }  
  
  
}

**create 2nd activity activity.xml**

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:app**="http://schemas.android.com/apk/res-auto"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**tools:context**=".Activity2"**>  
  
<**TextView**android:id**="@+id/txt"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="268dp"**android:text**="Demo"**android:textAlignment**="center"**android:textSize**="30dp"**android:textStyle**="bold"**app:layout\_constraintEnd\_toEndOf**="parent"**app:layout\_constraintTop\_toTopOf**="parent"**/>  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Java second only create 🡪 not write any thing in that**

**slip5**

**Q1Create android application to accept two number and find power and Average Display the result on the next activity on Button Click**

**Xml file 1**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/num1EditText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter first number"  
 android:inputType="numberDecimal"  
 android:layout\_marginBottom="16dp"/>  
  
 <EditText  
 android:id="@+id/num2EditText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter second number"  
 android:inputType="numberDecimal"  
 android:layout\_below="@id/num1EditText"  
 android:layout\_marginBottom="16dp"/>  
  
 <Button  
 android:id="@+id/calculateButton"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Calculate"  
 android:layout\_below="@id/num2EditText"/>  
  
  
  
  
  
</LinearLayout>

**Java file 1**

package com.example.slip5powerapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText num1EditText;  
 private EditText num2EditText;  
 private Button calculateButton;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 num1EditText = findViewById(R.id.*num1EditText*);  
 num2EditText = findViewById(R.id.*num2EditText*);  
 calculateButton = findViewById(R.id.*calculateButton*);  
  
 calculateButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 double num1 = Double.*parseDouble*(num1EditText.getText().toString());  
 double num2 = Double.*parseDouble*(num2EditText.getText().toString());  
  
 double power = Math.*pow*(num1, num2);  
 double average = (num1 + num2) / 2;  
  
 Intent intent = new Intent(MainActivity.this, ResutlantActivity.class);  
 intent.putExtra("power", power);  
 intent.putExtra("average", average);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

**xml file 2**

*<?*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=".ResutlantActivity">  
  
 <TextView  
 android:id="@+id/powerTextView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Power: "  
 android:textSize="20sp"  
 android:layout\_marginBottom="16dp"/>  
  
 <TextView  
 android:id="@+id/averageTextView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Average: "  
 android:textSize="20sp"  
 android:layout\_below="@id/powerTextView"/>  
  
</RelativeLayout>

**Java file 2**

package com.example.slip5powerapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class ResutlantActivity extends AppCompatActivity {  
  
 private TextView powerTextView;  
 private TextView averageTextView;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_resutlant*);  
 powerTextView = findViewById(R.id.*powerTextView*);  
 averageTextView = findViewById(R.id.*averageTextView*);  
  
 Intent intent = getIntent();  
 double power = intent.getDoubleExtra("power", 0);  
 double average = intent.getDoubleExtra("average", 0);  
  
 powerTextView.setText("Power: " + String.*valueOf*(power));  
 averageTextView.setText("Average: " + String.*valueOf*(average));  
  
 }  
}

**Q2) . Create an Android application that creates a custom Alert Dialog containing Friends Name and onClick of Friend Name Button greet accordingly.**

**Xml file**

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**RelativeLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:app**="http://schemas.android.com/apk/res-auto"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**tools:context**=".MainActivity"**>  
  
<**Button**android:id**="@+id/getBtn"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="150dp"**android:layout\_marginTop**="200dp"**android:text**="Show Alert"** />  
  
</**RelativeLayout**>

**Mainactivity.java**

**package** com.example.slip5\_1;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.app.AlertDialog;  
**import** android.content.DialogInterface;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.Toast;  
  
**import** java.util.ArrayList;  
  
**public class** MainActivity**extends** AppCompatActivity{  
**final** CharSequence[] Friend = { **"Neha"**, **"Shivani"**, **"Mahek"**, **"Sonal"** };  
ArrayList<Integer>slist= **new** ArrayList();  
**boolean**icount[] = **new boolean**[Friend.length];  
String msg=**""**;  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
Button btn= (Button)findViewById(R.id.*getBtn*);  
btn.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View v) {  
AlertDialog.Builder builder = **new** AlertDialog.Builder(MainActivity.**this**);  
builder.setTitle(**"Choose Friends"**)  
 .setMultiChoiceItems(Friend,icount, **new** DialogInterface.OnMultiChoiceClickListener() {  
@Override  
**public void** onClick(DialogInterfacearg0, **int** arg1, **boolean**arg2) {  
**if** (arg2) {  
*// If user select a item then add it in selected items*slist.add(arg1);  
 } **else if** (slist.contains(arg1)) {  
*// if the item is already selected then remove it*slist.remove(Integer.*valueOf*(arg1));  
 }  
 }  
 }) .setCancelable(**false**)  
 .setPositiveButton(**"Yes"**, **new** DialogInterface.OnClickListener() {  
@Override  
**public void** onClick(DialogInterfacedialog, **int** which) {  
msg= **""**;  
**for** (**int** i = **0**; i<slist.size(); i++) {  
msg= msg+ **"**\n**"** + (i + **1**) + **" : "** + Friend[slist.get(i)];  
 }  
Toast.*makeText*(getApplicationContext(), **"Total "** + slist.size() + **" Items Selected.**\n**"** + msg, Toast.*LENGTH\_SHORT*).show();  
 }  
 })  
 .setNegativeButton(**"No"**, **new** DialogInterface.OnClickListener() {  
@Override  
**public void** onClick(DialogInterfacedialog, **int** which) {  
Toast.*makeText*(MainActivity.**this**,**"No Option Selected"**,Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
*//Creating dialog box*AlertDialog dialog = builder.create();  
dialog.show();  
 }  
 });  
**}**

**}**

***Slip6 q1 same as slip12 also***

***Q1 Create a Simple application which send –Hello message from one activity to another with the help of Button (Use Intent)***

***Xml File 1***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/edit\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="enter here"  
 android:inputType="text"/>  
 <Button  
 android:id="@+id/btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click here"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="16dp"/>  
</LinearLayout>

***Java file 1***

package com.example.slip12hillapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import java.time.temporal.ValueRange;  
  
public class MainActivity extends AppCompatActivity {  
 private static String *value*;  
 public static String getValue(){  
 return *value*;  
 }  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 final EditText edittext= (EditText)findViewById(R.id.*edit\_text*);  
 Button button= (Button)findViewById(R.id.*btn*);  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 *value* = edittext.getText().toString().trim();  
 Intent intent=new Intent(MainActivity.this,SecondActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

***XML file 2***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 tools:context=".SecondActivity">  
 <TextView  
 android:id="@+id/text\_view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:gravity="center"/>  
  
</LinearLayout>

***Java file 2***

package com.example.slip12hillapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class SecondActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 TextView textView =findViewById(R.id.*text\_view*);  
 textView.setText(MainActivity.*getValue*());  
 }  
}

***Q2 Create Android application that Demostrate ListView And onClick of list Display the Toast***

***Xml file 1***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/message"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 android:padding="16dp"  
 android:text="Click an item to display the selection."/>  
  
 <ListView  
 android:id="@+id/list\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"/>  
  
  
</LinearLayout>

**Java file**

package com.example.listview1application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.TextView;  
import android.widget.ListView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 private ListView listView;  
  
 private TextView message;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 *// Get references to the ListView and TextView elements* listView = findViewById(R.id.*list\_view*);  
 *// message = findViewById(R.id.message);  
  
 // Create an array of items to display in the ListView* String[] items = {"Item 1", "Item 2", "Item 3", "Item 4", "Item 5"};  
  
 *// Create an ArrayAdapter to map the items to the views* ArrayAdapter<String> adapter = new ArrayAdapter<String>(this, android.R.layout.*simple\_list\_item\_1*, items);  
  
  
 *// Set the adapter on the ListView to display the items* listView.setAdapter(adapter);  
  
 *// Set an OnItemClickListener to display a message when an item is clicked* listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> parent, View view, int position, long id) {  
 String selectedItem = (String) parent.getItemAtPosition(position);  
 *//message.setText("You selected: " + selectedItem);* Toast.*makeText*(MainActivity.this, "You have selected"+selectedItem, Toast.*LENGTH\_SHORT*).show();  
  
 }  
 });  
  
 }  
}

***slip7***

***Q1. Create an Android Application That Demostrate Radio Button***

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 android:padding="100dp">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Select your gender:"/>  
  
 <RadioGroup  
 android:id="@+id/rg"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal">  
 <RadioButton  
 android:id="@+id/rb1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="male"/>  
  
 <RadioButton  
 android:id="@+id/rb2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="femal"/>  
 </RadioGroup>  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="submit"/>  
 </LinearLayout>  
  
</LinearLayout>

**javaFile**

package com.example.radiobuttonslip7application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.RadioButton;  
import android.widget.RadioGroup;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 private RadioGroup radioGroupGender;  
 private RadioButton radioButtonSelected;  
 private Button buttonSubmit;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 radioGroupGender=findViewById(R.id.*rg*);  
 buttonSubmit=findViewById(R.id.*button*);  
  
 buttonSubmit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 int selectedId=radioGroupGender.getCheckedRadioButtonId(); *// this method used to return which id selected h  
 //here we check* if(selectedId==-1){  
 Toast.*makeText*(MainActivity.this, "please select your gender", Toast.*LENGTH\_SHORT*).show();  
 }  
 else {  
 radioButtonSelected=findViewById(selectedId);  
 String selectedGender=radioButtonSelected.getText().toString();  
 Toast.*makeText*(MainActivity.this, "your gender is"+selectedGender, Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
  
 }  
}

***Q2 Create an Android Application to Demostrate phone call using implicit Intent***

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:layout\_gravity="center"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/edit\_phone"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Phone Number"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginRight="30dp"  
 android:inputType="number"  
 android:gravity="center" />  
  
  
 <Button  
 android:id="@+id/btn\_Dial"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Call"  
 android:backgroundTint="#DEDBDB"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"/>  
  
  
  
</LinearLayout>

***Java file***

package com.example.phonecallslip7application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 Button btnDial;  
 EditText edtPhone;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 edtPhone=findViewById(R.id.*edit\_phone*);  
 btnDial=findViewById(R.id. *btn\_Dial*);  
 btnDial.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String phoneNumber =edtPhone.getText().toString();  
 Intent iDial= new Intent(Intent.*ACTION\_DIAL*,Uri.*fromParts*("tel",phoneNumber,null));  
 startActivity(iDial);  
  
 }  
 });  
 }  
}

***Slip8***

***Q1 create an android application with login Screen. On successful login, give message go to next Activity(Without Using Database and use Table layout)***

***Xml file 1***

*<?*xml version="1.0" encoding="utf-8"*?>*<TableLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TableRow  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
 <TextView  
 android:id="@+id/textview"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Username"/>  
  
 <EditText  
 android:id="@+id/edittext1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="text"/>  
 </TableRow>  
 <TableRow  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
 <TextView  
 android:id="@+id/textview2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Password"/>  
  
 <EditText  
 android:id="@+id/edittext2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="text"/>  
  
 </TableRow>  
 <Button  
 android:id="@+id/button1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="login"/>  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="cancle"/>  
</TableLayout>

***Java1***

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
 EditText username;  
 EditText password;  
 Button login;  
 Button cancle;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 username=(EditText)findViewById(R.id.*edittext1*);  
 password=(EditText)findViewById(R.id.*edittext2*);  
 login=(Button)findViewById(R.id.*button1*);  
 cancle=(Button)findViewById(R.id.*button2*);  
 login.setOnClickListener(this);  
 cancle.setOnClickListener(this);  
  
  
 }  
  
 @Override  
 public void onClick(View view) {  
 String na=username.getText().toString();  
 String pa=password.getText().toString();  
  
 switch (view.getId())  
 {  
 case R.id.*button1*:  
 if(na.equals("chaitu")&&pa.equals("admin")){  
 Intent i=new Intent(this,SecondActivity.class);  
 i.putExtra("c1",na);  
 startActivity(i);  
  
 }  
 else  
 {  
 Toast.*makeText*(this, "check #username or #password",Toast.*LENGTH\_LONG*).show();  
 }  
 break;  
  
 case R.id.*button2*:  
 username.setText("");  
 password.setText("");  
 break;  
  
 default:  
 break;  
  
 }  
 }  
}

***xml file 2***

*<?*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"  
 android:orientation="vertical"  
 tools:context=".SecondActivity">  
 <TextView  
 android:id="@+id/text1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_centerVertical="true"  
 tools:content=".SecondActivity"/>  
  
 <Button  
 android:id="@+id/btn1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
  
 android:text="Logout"/>  
  
</RelativeLayout>

***Javafile 2***

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
  
public class SecondActivity extends AppCompatActivity implements View.OnClickListener {  
 Button Logout;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 Intent i=getIntent();  
 String str=i.getStringExtra("c1");  
 TextView t1=(TextView) findViewById(R.id.*text1*);  
 t1.setText("Logged In Sucessfully!"+str);  
 Logout=(Button) findViewById(R.id.*btn1*);  
 Logout.setOnClickListener(this);  
 }  
  
 @Override  
 public void onClick(View view1) {  
 switch (view1.getId())  
 {  
 case R.id.*btn1*:  
 Intent i=new Intent(this,MainActivity.class);  
 startActivity(i);  
 finish();  
 System.*exit*(0);  
 break;  
 default:  
 break;  
  
 }  
  
  
 }  
}

***Q2 Create application to send email with attachment.***

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="10dp"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="To:"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_to"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="textEmailAddress"/>  
  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Subject:"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_subject"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="textEmailSubject"/>  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Message"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_message"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:lines="10"  
 android:gravity="start|top"/>  
  
 <Button  
 android:id="@+id/button\_send"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="send"/>  
  
  
  
  
</LinearLayout>

**Java file**

package com.example.emailsendapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText mEditTextTo;  
 private EditText mEditTextSubject;  
  
 private EditText mEditTextMessage;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 mEditTextTo=findViewById(R.id.*edit\_text\_to*);  
 mEditTextSubject=findViewById(R.id.*edit\_text\_subject*);  
 mEditTextMessage=findViewById(R.id.*edit\_text\_message*);  
  
 Button buttonSend = findViewById(R.id.*button\_send*);  
  
 buttonSend.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
 sendMail();  
  
 }  
 });  
  
 }  
 private void sendMail(){  
 String recipientList=mEditTextTo.getText().toString();  
 String[] recipients =recipientList.split(",");  
 *//example@gmail.com, example2@gmail.com* String subject =mEditTextSubject.getText().toString();  
 String message =mEditTextMessage.getText().toString();  
  
 *//here now important part start here* Intent intent =new Intent(Intent.*ACTION\_SEND*);  
 intent.putExtra(Intent.*EXTRA\_EMAIL*,recipients);  
 intent.putExtra(Intent.*EXTRA\_SUBJECT*,subject);  
 intent.putExtra(Intent.*EXTRA\_TEXT*,message);  
 *//here email client* intent.setType("message/rfc822");  
 startActivity(Intent.*createChooser*(intent,"Choose an email client"));  
  
 *//this below part for attachment  
  
 // Uri attachmentUri = Uri.parse("file:///storage/emulated/0/Download/myfile.pdf");  
 // intent.putExtra(Intent.EXTRA\_STREAM, attachmentUri);  
  
 //startActivity(Intent.createChooser(intent, "Send email..."));* }  
}

***slip9***

Slip-9 Question 1

**Write an android application to accept two numbers from the user and display them and reject input if both numbers are greater than 10 and ask for two new numbers.**

**Xml file**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
xmlns:android="http://schemas.android.com/apk/res/android"  
xmlns:app="http://schemas.android.com/apk/res-auto"  
xmlns:tools="http://schemas.android.com/tools"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
android:padding="16dp"  
android:orientation="vertical"  
tools:context=".MainActivity">  
  
<EditText  
android:id="@+id/first\_number\_edittext"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:hint="Enter first number"  
android:inputType="number" />  
  
<EditText  
android:id="@+id/second\_number\_edittext"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:hint="Enter second number"  
android:inputType="number" />  
  
<Button  
android:id="@+id/submit\_button"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:text="Submit" />  
  
<TextView  
android:id="@+id/result\_textview"  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:paddingTop="16dp" />  
  
</LinearLayout>

**Java file**

package com.example.slip91;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
  
private EditText firstNumberEditText;  
 private EditText secondNumberEditText;  
 private Button submitButton;  
 private TextView resultTextView;  
  
@Override  
protected void onCreate(Bundle savedInstanceState) {  
super.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
firstNumberEditText = findViewById(R.id.*first\_number\_edittext*);  
secondNumberEditText = findViewById(R.id.*second\_number\_edittext*);  
submitButton = findViewById(R.id.*submit\_button*);  
resultTextView = findViewById(R.id.*result\_textview*);  
  
submitButton.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View view) {  
  
 String firstNumberString = firstNumberEditText.getText().toString();  
String secondNumberString = secondNumberEditText.getText().toString();  
  
 if (firstNumberString.isEmpty() || secondNumberString.isEmpty()) {  
 Toast.*makeText*(MainActivity.this, "Please enter two numbers", Toast.*LENGTH\_SHORT*).show();  
 return;  
}  
  
int firstNumber = Integer.*parseInt*(firstNumberString);  
 int secondNumber = Integer.*parseInt*(secondNumberString);  
  
 if (firstNumber >10 && secondNumber >10) {  
 Toast.*makeText*(MainActivity.this, "Both numbers cannot be greater than 10", Toast.*LENGTH\_SHORT*).show();  
firstNumberEditText.getText().clear();  
secondNumberEditText.getText().clear();  
 return;  
}  
  
 String resultString = "First number: " + firstNumber + "\n" + "Second number: " + secondNumber;  
resultTextView.setText(resultString);  
}  
 });  
}  
}

***Slip10***

***Q1). Create an Android Application that Demonstrate Switch and Toggle Button***

***Xml file***

***Xml file***

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**RelativeLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**android:padding**="16dp"**tools:context**=".MainActivity"**>  
  
<**Switch**android:id**="@+id/switchButton"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:text**="Switch"**android:checked**="false"**android:layout\_marginBottom**="100dp"**android:layout\_centerHorizontal**="true"**/>  
  
  
<**ToggleButton**android:id**="@+id/toggleButton"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:textOn**="On"**android:textOff**="Off"**android:checked**="false"**android:layout\_below**="@id/switchButton"**android:layout\_centerHorizontal**="true"**/>  
  
</**RelativeLayout**>

***Java file***

**package** com.example.slip10\_1;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.os.Bundle;  
**import** android.widget.CompoundButton;  
**import** android.widget.Switch;  
**import** android.widget.Toast;  
**import** android.widget.ToggleButton;  
  
**public class** MainActivity**extends** AppCompatActivity{  
**private** Switch switchButton;  
**private** ToggleButtontoggleButton;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
switchButton= findViewById(R.id.*switchButton*);  
toggleButton= findViewById(R.id.*toggleButton*);  
  
switchButton.setOnCheckedChangeListener(**new** CompoundButton.OnCheckedChangeListener() {  
@Override  
**public void** onCheckedChanged(CompoundButtonbuttonView, **boolean**isChecked) {  
**if** (isChecked) {  
*// Switch is on*Toast.*makeText*(MainActivity.**this**, **"Switch is on"**, Toast.*LENGTH\_SHORT*).show();  
 } **else** {  
*// Switch is off*Toast.*makeText*(MainActivity.**this**, **"Switch is off"**, Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
  
toggleButton.setOnCheckedChangeListener(**new** CompoundButton.OnCheckedChangeListener() {  
@Override  
**public void** onCheckedChanged(CompoundButtonbuttonView, **boolean**isChecked) {  
**if** (isChecked) {  
*// Toggle button is on*Toast.*makeText*(MainActivity.**this**, **"Toggle button is on"**, Toast.*LENGTH\_SHORT*).show();  
 } **else** {  
*// Toggle button is off*Toast.*makeText*(MainActivity.**this**, **"Toggle button is off"**, Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
 }  
}

***Q2 Demostrate Array Adapter using List View to Display list of fruits***

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
  
 <ListView  
 android:id="@+id/fruit\_list"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"/>  
</LinearLayout>  
  
</LinearLayout>

***Java file***

package com.example.slip10application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
public class MainActivity extends AppCompatActivity {  
 String[] fruitArray={"Apple","mango","Banana","Blackberry","Pinaple","strawbery"};  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 ArrayAdapter adapter=new ArrayAdapter<String>(this, androidx.appcompat.R.layout.*support\_simple\_spinner\_dropdown\_item*,fruitArray);  
 ListView listView=(ListView) findViewById(R.id.*fruit\_list*);  
 listView.setAdapter(adapter);  
  
  
 }  
}

***slip11***

***Q1.Create android application to change Font Size, Color and Font Family of String***

***Neha***

***Xml file***

<?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"  
android:layout\_alignParentEnd="true"  
android:layout\_alignParentStart="true"  
tools:context=".MainActivity"  
android:layout\_alignParentRight="true"  
android:layout\_alignParentLeft="true">  
  
<TextView  
android:id="@+id/myTextView"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="Hello World!"  
android:textSize="20sp"  
android:textColor="#000000"  
android:typeface="sans"  
android:layout\_centerInParent="true"/>  
  
<Button  
android:id="@+id/increaseSizeButton"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="Increase Size"  
android:layout\_below="@+id/myTextView"  
android:layout\_alignParentStart="true"  
android:layout\_alignParentLeft="true" />  
  
<Button  
android:id="@+id/decreaseSizeButton"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="Decrease Size"  
android:layout\_below="@+id/myTextView"  
android:layout\_alignParentEnd="true"  
android:layout\_alignParentRight="true" />  
  
<Button  
android:id="@+id/changeColorButton"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="Change Color"  
android:layout\_below="@+id/increaseSizeButton"  
android:layout\_alignParentStart="true"  
android:layout\_alignParentLeft="true" />  
  
<Button  
android:id="@+id/changeFontButton"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="Change Font"  
android:layout\_below="@+id/increaseSizeButton"  
android:layout\_alignParentEnd="true"  
android:layout\_alignParentRight="true" />  
  
</RelativeLayout>

***Java file***

package com.example.slip9\_1;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.graphics.Color;  
import android.graphics.Typeface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
  
public class MainActivity extends AppCompatActivity {  
  
private TextView textView;  
 private Button increaseSizeButton;  
 private Button decreaseSizeButton;  
 private Button changeColorButton;  
 private Button changeFontButton;  
 private int fontSize = 20;  
 private int textColor = Color.*BLACK*;  
 private String fontFamily = "sans-serif";  
  
@Override  
protected void onCreate(Bundle savedInstanceState) {  
super.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
textView = findViewById(R.id.*myTextView*);  
increaseSizeButton = findViewById(R.id.*increaseSizeButton*);  
decreaseSizeButton = findViewById(R.id.*decreaseSizeButton*);  
changeColorButton = findViewById(R.id.*changeColorButton*);  
changeFontButton = findViewById(R.id.*changeFontButton*);  
  
textView.setTextSize(fontSize);  
textView.setTextColor(textColor);  
textView.setTypeface(Typeface.*create*(fontFamily, Typeface.*NORMAL*));  
  
increaseSizeButton.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View view) {  
  
fontSize += 2;  
textView.setTextSize(fontSize);  
}  
 });  
  
decreaseSizeButton.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View view) {  
  
if (fontSize >2) {  
fontSize -= 2;  
textView.setTextSize(fontSize);  
}  
 }  
 });  
  
changeColorButton.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View view) {  
textColor = Color.*RED*;  
textView.setTextColor(textColor);  
}  
 });  
  
changeFontButton.setOnClickListener(new View.OnClickListener() {  
  
  
@Override  
public void onClick(View view) {  
  
fontFamily = "monospace";  
textView.setTypeface(Typeface.*create*(fontFamily, Typeface.*NORMAL*));  
}  
 });  
}  
}

***OR mam***

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

<**androidx.constraintlayout.widget.ConstraintLayout**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:app="http://schemas.android.com/apk/res-auto"**

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity"**

**android:background="@color/colorAccent"**>

<**TextView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Hello TYBCA!"**

**android:fontFamily="cursive"**

**android:textSize="70dp"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintLeft\_toLeftOf="parent"**

**app:layout\_constraintRight\_toRightOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

</**androidx.constraintlayout.widget.ConstraintLayout**>

***Q2.Create android first activity to accept information like student fisrt name middle name, last name date of birth. Address, Email ID and display all information on Second Activity whenever click on the Submit button***

***Xml file 1***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
  
  
 <EditText  
 android:id="@+id/fname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter stud first name"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/mname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter stud middle name"  
 android:text="stud last name"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/lname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter last name"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/birth\_date"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter date of birth "  
 android:inputType="text"/>  
  
 <EditText  
 android:id="@+id/address"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter address"  
 android:inputType="text"/>  
  
 <EditText  
 android:id="@+id/email\_id"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter email id"  
 android:inputType="text"/>  
  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="next"/>  
  
  
</LinearLayout>

***Java file 1***

package com.example.slip11studapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 final EditText editText1= findViewById(R.id.*fname*);  
 final EditText editText2=findViewById(R.id.*mname*);  
 final EditText editText3=findViewById(R.id.*lname*);  
 final EditText editText4=findViewById(R.id.*birth\_date*);  
 final EditText editText5=findViewById(R.id.*address*);  
 final EditText editText6=findViewById(R.id.*email\_id*);  
  
 Button button1=findViewById(R.id.*button*);  
  
 button1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String name =editText1.getText().toString().trim();  
 String releseyr=editText2.getText().toString().trim();  
 String collection=editText3.getText().toString().trim();  
 String dob=editText4.getText().toString().trim();  
 String saddress=editText5.getText().toString().trim();  
 String emailid=editText6.getText().toString().trim();  
 Bundle bundle =new Bundle();  
 bundle.putString("value1",name);  
 bundle.putString("value2",releseyr);  
 bundle.putString("value3",collection);  
 bundle.putString("value4",dob);  
 bundle.putString("value5",saddress);  
 bundle.putString("value6",emailid);  
  
  
 Intent intent =new Intent(MainActivity.this, SecondActivity.class);  
 intent.putExtras(bundle);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

**Xml file2**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".SecondActivity">  
  
 <TextView  
 android:id="@+id/text\_fname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
 <TextView  
 android:id="@+id/text\_mname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
 <TextView  
 android:id="@+id/text\_lname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_birth\_date"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_address"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_emailid"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
  
</LinearLayout>

**Java file 2**

package com.example.slip11studapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class SecondActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 Bundle bundle =getIntent().getExtras();  
 if(bundle!=null){  
 String value1 =bundle.getString("value1");  
 String value2 =bundle.getString("value2");  
 String value3 = bundle.getString("value3");  
 String value4 = bundle.getString("value4");  
 String value5 = bundle.getString("value5");  
 String value6 = bundle.getString("value6");  
  
 TextView textView1=findViewById(R.id.*text\_fname*);  
 TextView textView2=findViewById(R.id.*text\_mname*);  
 TextView textView3=findViewById(R.id.*text\_lname*);  
 TextView textView4=findViewById(R.id.*text\_birth\_date*);  
 TextView textView5=findViewById(R.id.*text\_address*);  
 TextView textView6=findViewById(R.id.*text\_emailid*);  
  
 textView1.setText(value1);  
 textView2.setText(value2);  
 textView3.setText(value3);  
 textView4.setText(value4);  
 textView5.setText(value5);  
 textView6.setText(value6);  
 }  
 }  
}

**Slip12**

**Q1 create a simple application which sends –hii message from one activity to another with help of button**

**Xml file 1**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/edit\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:inputType="text"/>  
 <Button  
 android:id="@+id/btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click here"  
 android:layout\_gravity="center"  
 android:layout\_marginTop="16dp"/>  
  
  
  
  
</LinearLayout>

**Java file1**

package com.example.slip12hillapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import java.time.temporal.ValueRange;  
  
public class MainActivity extends AppCompatActivity {  
 private static String *value*;  
 public static String getValue(){  
 return *value*;  
 }  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 final EditText edittext= (EditText)findViewById(R.id.*edit\_text*);  
 Button button= (Button)findViewById(R.id.*btn*);  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 *value* = edittext.getText().toString().trim();  
 Intent intent=new Intent(MainActivity.this,SecondActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

**xml file 2**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".SecondActivity">  
 <TextView  
 android:id="@+id/text\_view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"/>  
  
</LinearLayout>

**Java file2**

package com.example.slip12hillapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class SecondActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 TextView textView =findViewById(R.id.*text\_view*);  
 textView.setText(MainActivity.*getValue*());  
 }  
q2 OF SLIP 12

q1-XML FILE

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TimePicker

android:id="@+id/timePicker"

android:layout\_width="360dp"

android:layout\_height="334dp"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="32dp" />

<Button

android:id="@+id/btnSetTime"

android:layout\_width="167dp"

android:layout\_height="wrap\_content"

android:layout\_below="@id/timePicker"

android:layout\_marginTop="-9dp"

android:text="Set Time" />

<DatePicker

android:id="@+id/datePicker"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_below="@id/btnSetTime"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="26dp" />

<Button

android:id="@+id/btnSetDate"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_below="@id/timePicker"

android:layout\_alignParentEnd="true"

android:layout\_marginStart="31dp"

android:layout\_marginTop="-7dp"

android:layout\_marginEnd="19dp"

android:layout\_toEndOf="@+id/btnSetTime"

android:text="Set Date" />

</RelativeLayout>

JAVA FILE

package com.example.allslipssolution;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.DatePicker;

import android.widget.TimePicker;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

TimePicker timePicker;

DatePicker datePicker;

Button setTimeButton, setDateButton;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

timePicker = findViewById(R.id.timePicker);

datePicker = findViewById(R.id.datePicker);

setTimeButton = findViewById(R.id.btnSetTime);

setDateButton = findViewById(R.id.btnSetDate);

setTimeButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

setTime();

}

});

setDateButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

setDate();

}

});

}

private void setTime() {

timePicker.setIs24HourView(true);

int hour = timePicker.getCurrentHour();

int minute = timePicker.getCurrentMinute();

Toast.makeText(this, "Time Selected: " + hour + ":" + minute, Toast.LENGTH\_SHORT).show();

}

private void setDate() {

int day = datePicker.getDayOfMonth();

int month = datePicker.getMonth() + 1;

int year = datePicker.getYear();

Toast.makeText(this, "Date Selected: " + day + "/" + month + "/" + year, Toast.LENGTH\_SHORT).show();

}

}

**Slip13**

**Q1Create a folloeing vertical scroll view in android**

**Xml file**

**Here take linear layout and orientation vertical and button garavity remove by defalult left**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
  
 <ScrollView  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical">  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 1" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 2" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 3" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 4" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 5" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 6" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 7" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 10" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 8" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 9" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 11" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 12" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 13" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 14" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 15" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 16" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 17" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 18" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 19" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Button 20" />  
 </LinearLayout>  
 </ScrollView>  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Java file 🡪 don not do anything in java**

package com.example.slip13application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
}

**q2**

**XML FILE**

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

**<androidx.constraintlayout.widget.ConstraintLayout**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**xmlns:app="http://schemas.android.com/apk/res-auto"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity">**

**<fragment**

**android:id="@+id/map"**

**android:layout\_width="match\_parent"**

**android:layout\_height="0dp"**

**class="com.google.android.gms.maps.SupportMapFragment"**

**app:layout\_constraintTop\_toTopOf="parent"**

**app:layout\_constraintBottom\_toBottomOf="parent" />**

**<SearchView**

**android:id="@+id/mapSearch"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_margin="10dp"**

**android:queryHint="Search"**

**android:iconifiedByDefault="false"**

**android:elevation="5dp"**

**android:background="@drawable/bg\_search\_view"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent" />**

**</androidx.constraintlayout.widget.ConstraintLayout>**

**JAVA FILE**

**package com.example.allslipssolution;**

**import android.location.Address;**

**import android.location.Geocoder;**

**import android.os.Bundle;**

**import android.widget.SearchView;**

**import androidx.annotation.NonNull;**

**import androidx.appcompat.app.AppCompatActivity;**

**import com.google.android.gms.maps.CameraUpdateFactory;**

**import com.google.android.gms.maps.GoogleMap;**

**import com.google.android.gms.maps.OnMapReadyCallback;**

**import com.google.android.gms.maps.SupportMapFragment;**

**import com.google.android.gms.maps.model.LatLng;**

**import com.google.android.gms.maps.model.MarkerOptions;**

**import java.io.IOException;**

**import java.util.List;**

**public class MainActivity extends AppCompatActivity implements OnMapReadyCallback {**

**private GoogleMap myMap;**

**private SearchView searchView;**

**@Override**

**protected void onCreate(Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**searchView = findViewById(R.id.mapSearch);**

**SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager().findFragmentById(R.id.map);**

**searchView.setOnQueryTextListener(new SearchView.OnQueryTextListener() {**

**@Override**

**public boolean onQueryTextSubmit(String query) {**

**String loc = searchView.getQuery().toString();**

**List<Address> addr = null;**

**if (loc != null){**

**Geocoder geocoder = new Geocoder(MainActivity.this);**

**try {**

**addr = geocoder.getFromLocationName(loc, 1);**

**} catch (IOException e) {**

**throw new RuntimeException(e);**

**}**

**Address address = addr.get(0);**

**LatLng latLng = new LatLng(address.getLatitude(), address.getLongitude());**

**myMap.addMarker(new MarkerOptions().position(latLng).title(loc));**

**myMap.animateCamera(CameraUpdateFactory.newLatLngZoom(latLng, 10));**

**}**

**return false;**

**}**

**@Override**

**public boolean onQueryTextChange(String newText) {**

**return false;**

**}**

**});**

**mapFragment.getMapAsync(MainActivity.this);**

**}**

**@Override**

**public void onMapReady(@NonNull GoogleMap googleMap) {**

**myMap = googleMap;**

**}**

**}**

**SEARCH VIEW CODE**

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

**<shape xmlns:android="http://schemas.android.com/apk/res/android">**

**<solid android:color="@color/white"/>**

**<stroke**

**android:width="3dp"**

**android:color="@android:color/holo\_purple"/>**

**<corners android:radius="8dp"/>**

**</shape>**

**Slip14**

**Q1. Create simple application which shows life cycle of Activity.(use log)**

**Java file**

**package** com.example.tybca;

**import** androidx.appcompat.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.util.Log;

**import** android.os.Bundle;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity {

String **tag**=**"Events"**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

Log.*d*(**tag**,**"in on create event"**);

*//Displaying Toast with Hello Javatpoint message*

Toast.*makeText*(getApplicationContext(),**"Hello TYBCA**

**Student"**,Toast.***LENGTH\_SHORT***).show();

}

@Override

**public void** onStart() {

**super**.onStart();

Log.*d*(**tag**,**"in on start event"**);

}

@Override

**public void** onStop() {

**super**.onStop();

Log.*d*(**tag**,**"in on stop event"**);

}

@Override

**protected void** onResume() {

**super**.onResume();

Log.*d*(**tag**,**"in on resume event"**);

}

@Override

**public void** onPause() {

**super**.onPause();

Log.*d*(**tag**,**"in on pause event"**);

}

@Override

**protected void** onDestroy() {

**super**.onDestroy();

Log.*d*(**tag**,**"in on Destroy event"**);

}

}

**Q2 Create An android aaplication to send email**

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="10dp"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="To:"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_to"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="textEmailAddress"/>  
  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Subject:"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_subject"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="textEmailSubject"/>  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Message"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"/>  
 <EditText  
 android:id="@+id/edit\_text\_message"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:lines="10"  
 android:gravity="start|top"/>  
  
 <Button  
 android:id="@+id/button\_send"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="send"/>  
  
  
  
  
</LinearLayout>

**Java file**

package com.example.emailsendapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText mEditTextTo;  
 private EditText mEditTextSubject;  
  
 private EditText mEditTextMessage;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 mEditTextTo=findViewById(R.id.*edit\_text\_to*);  
 mEditTextSubject=findViewById(R.id.*edit\_text\_subject*);  
 mEditTextMessage=findViewById(R.id.*edit\_text\_message*);  
  
 Button buttonSend = findViewById(R.id.*button\_send*);  
  
 buttonSend.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
 sendMail();  
  
 }  
 });  
  
 }  
 private void sendMail(){  
 String recipientList=mEditTextTo.getText().toString();  
 String[] recipients =recipientList.split(",");  
 *//example@gmail.com, example2@gmail.com* String subject =mEditTextSubject.getText().toString();  
 String message =mEditTextMessage.getText().toString();  
  
 *//here now important part start here* Intent intent =new Intent(Intent.*ACTION\_SEND*);  
 intent.putExtra(Intent.*EXTRA\_EMAIL*,recipients);  
 intent.putExtra(Intent.*EXTRA\_SUBJECT*,subject);  
 intent.putExtra(Intent.*EXTRA\_TEXT*,message);  
 *//here email client* intent.setType("message/rfc822");  
 startActivity(Intent.*createChooser*(intent,"Choose an email client"));  
  
 *//this below part for attachment  
  
 // Uri attachmentUri = Uri.parse("file:///storage/emulated/0/Download/myfile.pdf");  
 // intent.putExtra(Intent.EXTRA\_STREAM, attachmentUri);  
  
 //startActivity(Intent.createChooser(intent, "Send email..."));* }  
}

**slip15**

**Q1.design following add a border to an AndroidLayout**

**-🡪Border xml file**

**Create->go in drawavble->rightclick->drawable resource file give name-> next->the set this**

**Border.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<shape xmlns:android="http://schemas.android.com/apk/res/android">  
<stroke  
 android:width="30dp"  
 android:color="#ffffff">  
  
</stroke>  
  
</shape>

**Main xml File**

*<?*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"  
 android:background="#000000"  
 android:padding="10dp"  
 tools:context=".MainActivity">  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/border"  
 android:orientation="vertical">  
  
 <TextView  
 android:id="@+id/text1"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"  
 android:background="#A00000FF"  
 android:gravity="center\_vertical|center\_horizontal"  
 android:text="Hello World!"  
 android:textColor="#ffffff"  
 android:textSize="40sp"/>  
  
 </LinearLayout>  
  
</RelativeLayout>

**Java file in java not wirte code**

package com.example.slip15bapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
}

**Q2 Create first activity to accept information like Employee Fisrt name Middle name Last name, salary,Address ,Email Id and display all information on Second activity where user click on Submit button**

**Xml file 1**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
  
  
  
 <EditText  
 android:id="@+id/efname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee first name"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/emname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee middle name"  
 android:inputType="text"/>  
  
 <EditText  
 android:id="@+id/elname"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee last name"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/esalary"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee salary"  
 android:inputType="text"/>  
  
 <EditText  
 android:id="@+id/eaddress"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee address"  
 android:inputType="text"/>  
 <EditText  
 android:id="@+id/eemail"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:hint="Enter employee email"  
 android:inputType="text"/>  
  
  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="next"/>  
  
  
  
  
  
</LinearLayout>

**Java file 1**

package com.example.slip15employeeapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 final EditText editText1= findViewById(R.id.*efname*);  
 final EditText editText2=findViewById(R.id.*emname*);  
 final EditText editText3=findViewById(R.id.*elname*);  
 final EditText editText4=findViewById(R.id.*esalary*);  
 final EditText editText5=findViewById(R.id.*eaddress*);  
 final EditText editText6=findViewById(R.id.*eemail*);  
 Button button1=findViewById(R.id.*button*);  
  
 button1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String name1 =editText1.getText().toString().trim();  
 String name2=editText2.getText().toString().trim();  
 String name3=editText3.getText().toString().trim();  
 String sal=editText4.getText().toString().trim();  
 String add=editText5.getText().toString().trim();  
 String email=editText6.getText().toString().trim();  
  
 Bundle bundle =new Bundle();  
 bundle.putString("value1",name1);  
 bundle.putString("value2",name2);  
 bundle.putString("value3",name3);  
 bundle.putString("value4",sal);  
 bundle.putString("value5",add);  
 bundle.putString("value6",email);  
  
 Intent intent =new Intent(MainActivity.this, SecondActivity.class);  
 intent.putExtras(bundle);  
 startActivity(intent);  
 }  
 });  
  
 }  
}

**xml file 2**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".SecondActivity">  
  
 <TextView  
 android:id="@+id/text\_efname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
 <TextView  
 android:id="@+id/text\_emname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
 <TextView  
 android:id="@+id/text\_elname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_esal"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_eadd"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
 <TextView  
 android:id="@+id/text\_eemail"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 />  
  
  
  
  
  
</LinearLayout>

**Java file 2**

package com.example.slip15employeeapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class SecondActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 Bundle bundle =getIntent().getExtras();  
 if(bundle!=null){  
 String value1 =bundle.getString("value1");  
 String value2 =bundle.getString("value2");  
 String value3 = bundle.getString("value3");  
 String value4 = bundle.getString("value4");  
 String value5 = bundle.getString("value5");  
 String value6 = bundle.getString("value6");  
  
 TextView textView1=findViewById(R.id.*text\_efname*);  
 TextView textView2=findViewById(R.id.*text\_emname*);  
 TextView textView3=findViewById(R.id.*text\_elname*);  
 TextView textView4=findViewById(R.id.*text\_esal*);  
 TextView textView5=findViewById(R.id.*text\_eadd*);  
 TextView textView6=findViewById(R.id.*text\_eemail*);  
 textView1.setText(value1);  
 textView2.setText(value2);  
 textView3.setText(value3);  
 textView4.setText(value4);  
 textView5.setText(value5);  
 textView6.setText(value6);  
 }  
 }  
}

**SLIP16**

**Q1.**

**Q2.Crea an Android application Ap [p it reads the Student Detail (Name Surname, Class, Gender, Hobbies, Marks)display the all information in another activity in table format on click of submit button**

**Xml file1**

**<LinearLayout>**

<**EditText**android:id**="@+id/txtname"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Name"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtsurname"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter SurName"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtclass"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Classname"**android:layout\_marginTop**="20dp"**/>  
  
  
<**EditText**android:id**="@+id/txtGender"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Gender"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txthobbies"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:hint**="Enter Hobbies"**android:layout\_marginTop**="20dp"**/>  
  
<**EditText**android:id**="@+id/txtmarks"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginLeft**="30dp"**android:layout\_marginRight**="30dp"**android:inputType**="number"**android:hint**="Enter Marks"**android:layout\_marginTop**="20dp"**/>  
  
<**Button**android:id**="@+id/btnsubmit"**android:layout\_width**="match\_parent"**android:layout\_height**="wrap\_content"**android:layout\_marginTop**="50dp"**android:text**="Submit"**android:layout\_marginLeft**="50dp"**android:layout\_marginRight**="50dp"**/>

**</LinearLayout>**

**Java file 1**

**Public class** MainActivity**extends** AppCompatActivity{  
EditTexttxtname,txtsurname,txtclass,txtGender,txthobbies,txtmarks;  
Button btnsubmit;  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
txtname=(EditText) findViewById(R.id.*txtname*);  
txtsurname=(EditText) findViewById(R.id.*txtsurname*);  
txtclass **public** =(EditText)findViewById(R.id.*txtclass*);  
txtGender=(EditText) findViewById(R.id.*txtGender*);  
txthobbies=(EditText) findViewById(R.id.*txthobbies*);  
txtmarks=(EditText) findViewById(R.id.*txtmarks*);  
  
btnsubmit=(Button) findViewById(R.id.*btnsubmit*);  
  
btnsubmit.setOnClickListener(**new** View.OnClickListener() {  
@Override  
**public void** onClick(View view) {  
String name=txtname.getText().toString().trim();  
String surname=txtsurname.getText().toString().trim();  
String classes=txtclass.getText().toString().trim();  
String Gender=txtGender.getText().toString().trim();  
String hobbies=txthobbies.getText().toString().trim();  
String marks=txtmarks.getText().toString().trim();*//fetching data*Bundle bundle=**new** Bundle();*//bundle import........... variable careate  
 //bundle variable use...*bundle.putString(**"name"**,name);*//key and where stroed name*bundle.putString(**"surname"**,surname);  
bundle.putString(**"classes"**,classes);  
bundle.putString(**"Gender"**,Gender);  
bundle.putString(**"hobbies"**,hobbies);  
bundle.putString(**"marks"**,marks);  
  
*//new intent open karnahai*Intent intent=**new** Intent(MainActivity.**this**,MainActivity2.**class**);  
intent.putExtras(bundle);  
startActivity(intent);  
 }

});

}

}

**Xml file2**

**<TableLayout>**

<**TableRow**android:layout\_marginTop**="300dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
  
<**TextView**android:id**="@+id/txt\_name"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="30dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**android:textAlignment**="center"**/>  
  
<**TextView**android:id**="@+id/txt\_surname"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
  
<**TableRow**android:layout\_marginTop**="30dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
<**TextView**android:id**="@+id/txt\_classname"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
<**TextView**android:id**="@+id/txt\_Gender"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
  
<**TableRow**android:layout\_marginTop**="30dp"**android:layout\_marginLeft**="40dp"**android:layout\_marginRight**="40dp"**>  
<**TextView**android:id**="@+id/txt\_hobbies"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
  
<**TextView**android:id**="@+id/txt\_marks"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_marginRight**="40dp"**android:layout\_marginLeft**="40dp"**android:text**="Hello"**/>  
</**TableRow**>  
</**TableLayout**>

**Java file 2**

TextViewtxt\_name,txt\_surname,txt\_classname,txt\_Gender,txt\_hobbies,txt\_marks;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main2*);  
  
  
Bundle bundle=getIntent().getExtras();  
  
txt\_name= (TextView) findViewById(R.id.*txt\_name*);  
txt\_surname=(TextView) findViewById(R.id.*txt\_surname*);  
txt\_classname=(TextView) findViewById(R.id.*txt\_classname*);  
txt\_Gender=(TextView) findViewById(R.id.*txt\_Gender*);  
txt\_hobbies=(TextView) findViewById(R.id.*txt\_hobbies*);  
txt\_marks=(TextView) findViewById(R.id.*txt\_marks*);  
  
  
**if**( bundle != **null**)  
 {  
String name = bundle.getString(**"name"**);  
String surname = bundle.getString(**"surname"**);  
String classes = bundle.getString(**"classes"**);  
String Gender = bundle.getString(**"Gender"**);  
String hobbies = bundle.getString(**"hobbies"**);  
String marks = bundle.getString(**"marks"**);  
  
txt\_name.setText(name);  
txt\_surname.setText(surname);  
txt\_classname.setText(classes);  
txt\_Gender.setText(Gender);  
txt\_hobbies.setText(hobbies);  
txt\_marks.setText(marks);  
  
 }  
 }  
**}**

**Q2 .Create an android application that demonstrate TimePicker and display selected time on TextView.**

1)Xml file

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
xmlns:app="http://schemas.android.com/apk/res-auto"  
xmlns:tools="http://schemas.android.com/tools"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
tools:context=".MainActivity">  
  
<TimePicker  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:id="@+id/timepicker">  
  
</TimePicker>  
  
  
<TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_centerInParent="true"  
android:layout\_below="@+id/timepicker"  
android:id="@+id/time">  
  
</TextView>  
  
  
</RelativeLayout>

2)Java file

package com.example.slip16\_2;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.annotation.SuppressLint;  
import android.os.Bundle;  
import android.widget.TextView;  
import android.widget.TimePicker;  
  
public class MainActivity extends AppCompatActivity {  
 TimePicker timePicker;  
TextView textView;  
@SuppressLint("MissingInflatedId")  
@Override  
protected void onCreate(Bundle savedInstanceState) {  
super.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
timePicker=findViewById(R.id.*timepicker*);  
textView=findViewById(R.id.*time*);  
  
timePicker.setOnTimeChangedListener(new TimePicker.OnTimeChangedListener() {  
@Override  
public void onTimeChanged(TimePicker timePicker, int i, int i1) {  
textView.setText(i+":"+i1);  
}  
 });  
}  
}

**Slip 17**

**Q1 Write an android code to make phone call using intent**

***Xml file***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:layout\_gravity="center"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/edit\_phone"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Phone Number"  
 android:layout\_marginLeft="30dp"  
 android:layout\_marginRight="30dp"  
 android:inputType="number"  
 android:gravity="center" />  
  
  
 <Button  
 android:id="@+id/btn\_Dial"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Call"  
 android:backgroundTint="#DEDBDB"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"/>  
  
  
  
</LinearLayout>

**Java file**

package com.example.phonecallslip7application;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
public class MainActivity extends AppCompatActivity {  
 Button btnDial;  
 EditText edtPhone;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 edtPhone=findViewById(R.id.*edit\_phone*);  
 btnDial=findViewById(R.id. *btn\_Dial*);  
 btnDial.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String phoneNumber =edtPhone.getText().toString();  
 Intent iDial= new Intent(Intent.*ACTION\_DIAL*,Uri.*fromParts*("tel",phoneNumber,null));  
 startActivity(iDial);  
  
 }  
 });  
 }  
}

**Q2 Construct an android Application to accept a number and calculate Factorial and sum of Digit of a give number using Context Menu**

**Xml File**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
 <EditText  
 android:id="@+id/number\_edit\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter a number" />  
  
 <TextView  
 android:id="@+id/factorial\_text\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Factorial: " />  
  
 <TextView  
 android:id="@+id/sum\_of\_digits\_text\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Sum of Digits: " />  
  
  
  
</LinearLayout>

**Java file**

package com.example.myapplication;  
  
  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.ContextMenu;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
  
 private EditText numberEditText;  
 private TextView factorialTextView;  
 private TextView sumOfDigitsTextView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 numberEditText = findViewById(R.id.*number\_edit\_text*);  
 factorialTextView = findViewById(R.id.*factorial\_text\_view*);  
 sumOfDigitsTextView = findViewById(R.id.*sum\_of\_digits\_text\_view*);  
  
 registerForContextMenu(numberEditText);  
 }  
  
 private int factorial(int n) {  
 if (n == 0 || n == 1) {  
 return 1;  
 } else {  
 return n \* factorial(n - 1);  
 }  
 }  
  
 private int sumOfDigits(int n) {  
 int sum = 0;  
 while (n > 0) {  
 sum += n % 10;  
 n /= 10;  
 }  
 return sum;  
 }  
  
 @Override  
 public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {  
 super.onCreateContextMenu(menu, v, menuInfo);  
 menu.setHeaderTitle("Choose an operation");  
 menu.add(0, 1, 0, "Calculate Factorial");  
 menu.add(0, 2, 0, "Calculate Sum of Digits");  
 factorialTextView.setText("Factorial: ");  
 sumOfDigitsTextView.setText("Sum of Digits: ");  
 }  
  
 @Override  
 public boolean onContextItemSelected(@NonNull MenuItem item) {  
 int number = Integer.*parseInt*(numberEditText.getText().toString());  
 switch (item.getItemId()) {  
 case 1:  
 int factorialResult = factorial(number);  
 factorialTextView.setText("Factorial: " + factorialResult);  
 return true;  
 case 2:  
 int sumResult = sumOfDigits(number);  
 sumOfDigitsTextView.setText("Sum of Digits: " + sumResult);  
 return true;  
 default:  
 return super.onContextItemSelected(item);  
 }  
 }  
}

***// slip18Q1.***

***//Q1 Create an android Application that Demostrate Alert Dilog Box***

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Hello World!"/>  
  
</LinearLayout>

**//Java file**

package com.example.alterdilogboxapplication;  
  
import android.content.DialogInterface;  
import android.support.v7.app.AlertDialog;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 *//Single button dilog box* AlertDialog alertDialog=new AlertDialog.Builder(this).create();  
 alertDialog.setTitle("Terms & Condition");  
 alertDialog.setIcon(R.drawable.*baseline\_info\_24*);  
 alertDialog.setMessage("Have you read all the term and condition");  
  
 alertDialog.setButton(DialogInterface.*BUTTON\_POSITIVE*, "Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 Toast.*makeText*(MainActivity.this, " Yes,You Can Process now", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
  
 alertDialog.show();

}

**(OR)MAM**

**XML FILE**

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Close app"/>  
  
  
  
</RelativeLayout>

**JAVA FILE**

package com.example.slip18dialogapplication;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.DialogInterface;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 Button closeButton;  
 AlertDialog.Builder builder;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 closeButton=(Button) findViewById(R.id.*btn*);  
 builder =new AlertDialog.Builder(this);  
 closeButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 builder.setMessage(R.string.*dialog\_message*).setTitle(R.string.*dialog\_title*);  
  
 builder .setMessage("Do you want to close this application")  
 .setCancelable(false)  
 .setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
 finish();  
 Toast.*makeText*(MainActivity.this, "you choose yes action for alert box", Toast.*LENGTH\_SHORT*).show();  
  
 }  
 })  
 .setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialogInterface, int i) {  
  
 dialogInterface.cancel();  
  
 Toast.*makeText*(MainActivity.this, "you choose no action for alert bo", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
 AlertDialog alert = builder.create();  
  
 alert.setTitle("AlertDialogExample");  
 alert.show();  
  
 }  
 });  
  
 }  
}

**string file in res->valiue->string.xml**

<resources>  
 <string name="app\_name">Slip18DialogApplication</string>  
 <string name="dialog\_message">Welcome to Alert Dialog</string>  
 <string name="dialog\_title">Javapoint Alert Dialog</string>  
  
</resources>

**Q2Create An android application to accept two number and find power and Average Display the result on the next Activity usin context menu**

**Xml file 1**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/number1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="numberDecimal"  
 android:hint="Enter a number"/>  
  
 <EditText  
 android:id="@+id/number2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="numberDecimal"  
 android:hint="Enter another number"/>  
 <Button  
 android:id="@+id/calculate"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Calculate"/>  
  
  
  
</LinearLayout>

Java file 1

package com.example.slip18contextmenuapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText number1;  
 private EditText number2;  
 private Button calculate;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 number1 = findViewById(R.id.*number1*);  
 number2 = findViewById(R.id.*number2*);  
 calculate = findViewById(R.id.*calculate*);  
 calculate.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 double num1 = Double.*parseDouble*(number1.getText().toString());  
 double num2 = Double.*parseDouble*(number2.getText().toString());  
  
 double power = Math.*pow*(num1, num2);  
 double average = (num1 + num2) / 2;  
  
 Intent intent = new Intent(MainActivity.this, SecondActivity.class);  
 intent.putExtra("power", power);  
 intent.putExtra("average", average);  
 startActivity(intent);  
 }  
 });  
  
  
  
  
  
 }  
}

**xml file 2**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".SecondActivity">  
  
 <TextView  
 android:id="@+id/result\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"/>  
  
  
  
</LinearLayout>

**Java file2**

package com.example.slip18contextmenuapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.ClipData;  
import android.content.ClipboardManager;  
import android.content.Context;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.ContextMenu;  
import android.view.MenuItem;  
import android.view.View;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class SecondActivity extends AppCompatActivity {  
 private TextView resultText;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 resultText = findViewById(R.id.*result\_text*);  
  
 double power = getIntent().getDoubleExtra("power", 0);  
 double average = getIntent().getDoubleExtra("average", 0);  
  
 String result = "Power: " + power + "\nAverage: " + average;  
 resultText.setText(result);  
  
 registerForContextMenu(resultText);  
  
  
 }  
  
 @Override  
 public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {  
 super.onCreateContextMenu(menu, v, menuInfo);  
 getMenuInflater().inflate(R.menu.*context\_menu*, menu);  
 }  
  
 @Override  
 public boolean onContextItemSelected(MenuItem item) {  
 switch (item.getItemId()) {  
 case R.id.*power*:  
 ClipboardManager clipboard = (ClipboardManager) getSystemService(Context.*CLIPBOARD\_SERVICE*);  
 ClipData clip = ClipData.*newPlainText*("result", resultText.getText().toString());  
 clipboard.setPrimaryClip(clip);  
 Toast.*makeText*(this, "Result copied to clipboard", Toast.*LENGTH\_SHORT*).show();  
 return true;  
 case R.id.*average*:  
 Intent shareIntent = new Intent(Intent.*ACTION\_SEND*);  
 shareIntent.setType("text/plain");  
 shareIntent.putExtra(Intent.*EXTRA\_TEXT*, resultText.getText().toString());  
 startActivity(Intent.*createChooser*(shareIntent, "Share result"));  
 return true;  
 default:  
 return super.onContextItemSelected(item);  
 }  
  
 }  
}

**Create menu file in res ->>creat new directori in 🡪 that create context\_menu for this 🡪 go to res🡪 directory🡪layou resource in ok**

*<?*xml version="1.0" encoding="utf-8"*?>*<menu xmlns:android="http://schemas.android.com/apk/res/android">  
 <item  
 android:id="@+id/power"  
 android:title="Power"/>  
 <item  
 android:id="@+id/average"  
 android:title="Average"/>  
</menu>

**Slip19**

**Q1.Create an android application that on/off the bulb using Toggle Button**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <ToggleButton  
 android:id="@+id/toggle\_button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"/>  
</LinearLayout>

**Java file**

package com.example.slip19bulbonoffapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Toast;  
import android.widget.ToggleButton;  
  
public class MainActivity extends AppCompatActivity {  
 ToggleButton toggleButton;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 toggleButton=(ToggleButton)findViewById(R.id.*toggle\_button*);  
 toggleButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 if(((ToggleButton)view).isChecked()){  
 Toast.*makeText*(MainActivity.this, "Bulb is on", Toast.*LENGTH\_SHORT*).show();  
 }else {  
 Toast.*makeText*(MainActivity.this, "Bilb is off", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
 }  
}

***Q2)***.**Create application to send SMS message. After sending message display delivery report of message.**

**Xml file**

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**RelativeLayout**xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:app**="http://schemas.android.com/apk/res-auto"**xmlns:tools**="http://schemas.android.com/tools"**android:layout\_width**="match\_parent"**android:layout\_height**="match\_parent"**tools:context**=".MainActivity"**>  
  
<**TextView**android:id**="@+id/textView1"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_alignParentTop**="true"**android:layout\_centerHorizontal**="true"**android:textSize**="30dp"** />  
  
<**TextView**android:id**="@+id/textView2"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:textSize**="30dp"**android:layout\_below**="@+id/textView1"** />  
  
  
<**EditText**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:id**="@+id/editText"**android:hint**="Enter Phone Number"**android:layout\_centerHorizontal**="true"** />  
  
<**EditText**android:id**="@+id/editText2"**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:layout\_below**="@+id/editText"**android:layout\_centerHorizontal**="true"**android:hint**="Enter SMS"** />  
  
<**Button**android:layout\_width**="wrap\_content"**android:layout\_height**="wrap\_content"**android:text**="Send Sms"**android:id**="@+id/btnSendSMS"**android:layout\_below**="@+id/editText2"**android:layout\_centerHorizontal**="true"**android:layout\_marginTop**="48dp"** />  
  
</**RelativeLayout**>

***Main.java***

**public class** MainActivity**extends** AppCompatActivity{  
  
**private static final int** *MY\_PERMISSIONS\_REQUEST\_SEND\_MSG* = **0**;  
Button sendBtn;  
EditTexttxtphoneNo;  
EditTexttxtMessage;  
String phoneNo;  
String message;  
  
@Override  
**protected void** onCreate(Bundle savedInstanceState) {  
**super**.onCreate(savedInstanceState);  
setContentView(R.layout.*activity\_main*);  
  
sendBtn= (Button) findViewById(R.id.*btnSendSMS*);  
txtphoneNo= (EditText) findViewById(R.id.*editText*);  
txtMessage= (EditText) findViewById(R.id.*editText2*);  
  
sendBtn.setOnClickListener(**new** View.OnClickListener() {  
**public void** onClick(View view) {  
sendSMSMessage();  
 }  
 });  
 }  
  
**protected void** sendSMSMessage() {  
phoneNo= txtphoneNo.getText().toString();  
message = txtMessage.getText().toString();  
  
**if** (ContextCompat.*checkSelfPermission*(**this**,  
SEND\_MSG)  
 != PackageManager.*PERMISSION\_GRANTED*) {  
**if** (ActivityCompat.*shouldShowRequestPermissionRationale*(**this**,  
SEND\_MSG)) {  
 } **else** {  
ActivityCompat.*requestPermissions*(**this**,  
**new** String[]{Manifest.permission.SEND\_MSG},  
*MY\_PERMISSIONS\_REQUEST\_SEND\_MSG*);  
 }  
 }  
 }  
  
  
@Override  
**public void** onRequestPermissionsResult(**int** requestCode, String permissions[], **int**[] grantResults) {  
**super**.onRequestPermissionsResult(requestCode, permissions, grantResults);  
**switch** (requestCode) {  
**case** *MY\_PERMISSIONS\_REQUEST\_SEND\_MSG*: {  
**if** (grantResults.length>**0**&&grantResults[**0**] == PackageManager.*PERMISSION\_GRANTED*) {  
SmsManagersmsManager= SmsManager.*getDefault*();  
smsManager.sendTextMessage(phoneNo, **null**, message, **null**, **null**);  
Toast.*makeText*(getApplicationContext(), **"SMS sent."**,  
Toast.*LENGTH\_LONG*).show();  
 } **else** {  
Toast.*makeText*(getApplicationContext(),  
**"SMS faild, please try again."**, Toast.*LENGTH\_LONG*).show();  
**return**;  
 }  
 }  
 }  
  
 }  
  
**private class** SEND\_MSG {  
 }  
}

***manefiest file.xml***

*<?*xml version**="1.0"** encoding**="utf-8"***?>*<**manifest** xmlns:android**="http://schemas.android.com/apk/res/android"**xmlns:tools**="http://schemas.android.com/tools"**>  
<**uses-permission** android:name**="android.permission.SEND\_MSG"** />  
  
<**application**android:allowBackup**="true"**android:dataExtractionRules**="@xml/data\_extraction\_rules"**android:fullBackupContent**="@xml/backup\_rules"**android:icon**="@mipmap/ic\_launcher"**android:label**="@string/app\_name"**android:supportsRtl**="true"**android:theme**="@style/Theme.Slip19\_2"**tools:targetApi**="31"**>  
  
  
<**activity**android:name**=".MainActivity"**android:exported**="true"**>  
<**intent-filter**>  
<**action** android:name**="android.intent.action.MAIN"** />  
  
<**category** android:name**="android.intent.category.LAUNCHER"** />  
</**intent-filter**>  
  
</**activity**>  
  
</**application**>  
</**manifest**>

**//slip20**

**//q1.create Android Program to Change The image on the Screen**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"  
 android:orientation="vertical"  
 android:gravity="center">  
 <Button  
 android:id="@+id/changeImageButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click here to channge image"  
 android:layout\_marginBottom="100dp"  
 android:gravity="center"/>  
 <ImageView  
 android:id="@+id/image\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:src="@drawable/image1"/>

**Java file**

package com.example.sliceapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
  
public class MainActivity extends AppCompatActivity {  
 private ImageView i1; *//create variable for ImageView  
 // private int[] //image={R.drawable.image,R.drawable.nature\_image,R.drawable.sun\_sine\_img};  
 // private int imageIndex=0; //declare here give private specifier  
 //here we create array of images that you want to display in our app. and strore this images in app resource i.e res->drawable* int[] image = {R.drawable.*image1*, R.drawable.*image2*, R.drawable.*image3*};  
 int imageIndex = 0; *// set counter variable equal to 0* @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 *// here initialize the ImageView variable by findViewById()* i1 = findViewById(R.id.*image\_view*);  
 *//here we create array of images that you want to display in our app. and strore this images in app resource i.e res->drawable* int[] image = {R.drawable.*image1*, R.drawable.*image2*, R.drawable.*image3*};  
  
  
  
 Button b1 = findViewById(R.id.*changeImageButton*); *//button will change image* b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
 changeImg(); *//here we call changeImg() merhod* }  
 });  
 }  
 private void changeImg(){ imageIndex = (imageIndex + 1) % image.length; i1.setImageResource(image[imageIndex]);  
 }}

**(OR) MAM**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <LinearLayout  
  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 android:paddingBottom="40px"  
 android:weightSum="2">  
  
 <RadioGroup  
 android:id="@+id/rg"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
  
 <RadioButton  
 android:id="@+id/rb1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 1"/>  
  
  
 <RadioButton  
 android:id="@+id/rb2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 2"/>  
  
 <RadioButton  
 android:id="@+id/rb3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 3"/>  
  
  
  
  
 </RadioGroup>  
  
  
 </LinearLayout>  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:src="@drawable/image1"/>  
  
  
</RelativeLayout>

**Java file**

package com.example.imageapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.ImageView;  
import android.widget.RadioGroup;  
  
public class MainActivity extends AppCompatActivity implements RadioGroup.OnCheckedChangeListener {  
 RadioGroup group1;  
  
 ImageView img;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 group1 = (RadioGroup) findViewById(R.id.*rg*);  
 group1.setOnCheckedChangeListener((RadioGroup.OnCheckedChangeListener)this);  
 img = (ImageView) findViewById(R.id.*imageView*);  
  
 }  
  
 @Override  
 public void onCheckedChanged(RadioGroup radioGroup, int i) {  
 switch (i) {  
 case R.id.*rb1*:  
 img.setImageResource(R.drawable.*image1*);  
 break;  
  
 case R.id.*rb2*:  
 img.setImageResource(R.drawable.*image2*);  
 break;  
  
 case R.id.*rb3*:  
 img.setImageResource(R.drawable.*image3*);  
 break;  
  
 default:  
 break;  
  
 }  
  
  
 }  
}

**Q.2. Demostrate Array Adapter using List View display list of Country**

**XML file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context=".S20OrQ1MenuActivity">  
  
 <ListView  
 android:id="@+id/country\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="492dp" />  
  
</LinearLayout>

**//JAVA File**

package com.example.sliceapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
import java.util.ArrayList;  
*// array adpater with list view*public class S20OrQ1MenuActivity extends AppCompatActivity {  
 ListView countryListView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_s20\_or\_q1\_menu*);  
  
 *//Initialize the ListView* countryListView=findViewById(R.id.*country\_list*);  
 ArrayList<String>country=new ArrayList<>();  
 country.add("india");  
 country.add("china");  
 country.add("America");  
  
  
 *//Creat an array of countires* ArrayAdapter<String>arrayAdapter=new ArrayAdapter<>(this,android.R.layout.*simple\_list\_item\_1*,country);  
 *// array adapter h vo android ki class hoti h jo ki jo madat kari h java ke array adapte karne m ya niki agar android ko java ke array list view me dikhane h to usko array Adapter class ka estmal karna padega* countryListView.setAdapter(arrayAdapter);  
 }  
  
}