**Activity\_main.xml**

**<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/white"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/num1"  
 android:layout\_width="237dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="180dp"  
 android:layout\_gravity="center"  
 android:paddingLeft="20dp"  
 android:hint="Enter the number"  
 android:textColor="@color/black"  
 android:inputType="number"  
 android:singleLine="true"  
 android:minHeight="48dp" />  
  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"  
 android:gravity="center"  
 android:padding="15dp"  
 android:text="Find Factorial"  
 android:textAllCaps="false"/>  
  
</LinearLayout>**

**MainActivity.java**

**package com.example.ptr18;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
import androidx.appcompat.app.AppCompatActivity;  
public class MainActivity extends AppCompatActivity {  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 EditText ed1 = findViewById(R.id.*num1*);  
 Button b1 = findViewById(R.id.*button*);  
  
 b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 Intent intent = new Intent(MainActivity.this, MainActivity2.class);  
 String no = String.*valueOf*(ed1.getText());  
 int number = Integer.*parseInt*(no);  
 intent.putExtra("number", no);  
 startActivity(intent);  
  
 }  
 });  
 }  
}**

**Activity\_main2.xml**

**<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/white"  
 android:gravity="center"  
 android:padding="20dp">  
  
 <TextView  
 android:id="@+id/resultTextView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Result will appear here"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 android:textColor="#000000"  
 android:layout\_marginTop="20dp" />  
  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/button2"  
 android:text="Calculate Factorial"  
 android:textSize="20sp"  
 android:textColor="@color/white"  
 />  
</LinearLayout>**

**MainActivity2.java**

**package com.example.ptr18;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.content.Intent;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity2 extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
  
 TextView resultTextView = findViewById(R.id.*resultTextView*);  
  
 Button b2=findViewById(R.id.*button2*);  
 b2.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent receive=getIntent();  
 String number=receive.getStringExtra("number");  
 int n=Integer.*parseInt*(number);  
 int i,fact=1;  
 for(i=1;i<=n;i++){  
 fact=fact\*i;  
 }  
 resultTextView.setText("Factorial:"+fact);  
 }**

**Output:** 

