SLIP 3

Q1.

A) Create an Android Application to accept two numbers and create two buttons

(power and Average). Display the result on the next activity on Button click.

**Activity\_main.xml**

<?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>

<TextView

android:id="@+id/n1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:textSize="25dp"

android:text="Number1" />

<EditText

android:id="@+id/num1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="15"

android:hint="num1"/>

</TableRow>

<TableRow>

<TextView

android:id="@+id/N2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Number2"

android:textSize="25dp"

tools:layout\_editor\_absoluteX="49dp"

tools:layout\_editor\_absoluteY="134dp" />

<EditText

android:id="@+id/num2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="num2"

android:ems="10"/>

</TableRow>

<TableRow>

<Button

android:id="@+id/b1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Power"

android:layout\_gravity="center"

tools:layout\_editor\_absoluteX="138dp"

tools:layout\_editor\_absoluteY="257dp" />

<Button

android:id="@+id/b2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Average"

android:layout\_gravity="center"

tools:layout\_editor\_absoluteX="138dp"

tools:layout\_editor\_absoluteY="257dp" />

</TableRow>

</TableLayout>

**MainActivty.java**

package com.example.mypoweravg;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

EditText num1, num2;

Button b1, b2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b1 = (Button) findViewById(R.id.b1);

b2 = (Button) findViewById(R.id.b2);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

try {

num1 = (EditText) findViewById(R.id.num1);

num2 = (EditText) findViewById(R.id.num2);

int n1 = Integer.parseInt(num1.getText().toString());

int n2 = Integer.parseInt((num2.getText().toString()));

int result = (int) Math.pow(n1, n2);

Intent i = new Intent(getApplicationContext(), MainActivity2.class);

i.putExtra("text", "Power=");

i.putExtra("result", result);

startActivity(i);

} catch (NumberFormatException ne) {

Log.e("Error", "Error");

}

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

try {

num1 = (EditText) findViewById(R.id.num1);

num2 = (EditText) findViewById(R.id.num2);

int n1 = Integer.parseInt(num1.getText().toString());

int n2 = Integer.parseInt((num2.getText().toString()));

double result = (n1 + n2) / 2;

Intent i = new Intent(getApplicationContext(), MainActivity2.class);

i.putExtra("text", "Average=");

i.putExtra("result", result);

startActivity(i);

} catch (NumberFormatException ne) {

Log.e("Error", "Error");

}

}

});

}

}

**Activty\_main2.xml**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity2">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/tv" />

</LinearLayout>

**MainActivity2.java**

package com.example.mypoweravg;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

TextView tv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

tv = (TextView) findViewById(R.id.tv);

Intent i = getIntent();

Bundle extras = i.getExtras();

String res = extras.getString("text");

if(res.equals("Power=")){

res+= extras.getInt("result");

tv.setText(res);

}

else{

res+=extras.getDouble("result");

tv.setText(res);

}

}

}