3) 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.

Ans:-

Activity\_power\_and\_average.xınl: -

<?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=".PowerAverage">

<EditText

android:id="@+id/num1"

android:layout\_width="132dp"

android:layout\_height="74dp"

android:ems="10"

android:inputType="textPersonName"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.1"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraint Vertical\_bias="0.17" />

<Button

android:id="@+id/po"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Power"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.179"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.499" />

<Button

android:id="@+id/av"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Average"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.766"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.499" />

<EditText

android:id="@+id/num1"

android:layout\_width="135dp"

android:layout\_height="69dp"

android:ems="10"

android:inputType="number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.105"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.162" />

<EditText

android:id="@+id/num2"

android:layout\_width="141dp"

android:layout\_height="69dp"

android:ems="10"

android:inputType="number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.874"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.161" />

<Button

android:id="@+id/next"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Send Message"

android:textAllCaps="false"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.864" />

<EditText

android:id="@+id/msg"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

android:textAlignment="center"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.713" />

</androidx.constraintlayout.widget.ConstraintLayout>

**PowerAndAverage.java: -**

package com.example.assignedproject;

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;

import java.lang.Math;

public class PowerAverage extends AppCompatActivity {

EditText n1;

EditText n2;

Button pow;

Button avg;

Button nxt;

EditText msg;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_power\_average);

n1 = findViewById(R.id.num1);

n2 = findViewById(R.id.num2);

pow = findViewById(R.id.po);

avg = findViewById(R.id.av);

nxt = findViewById(R.id.next);

msg = findViewById(R.id.msg);

pow.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

double a = Double.parseDouble(n1.getText().toString());

double b = Double.parseDouble(n2.getText().toString());

Toast.makeText(PowerAverage.this, "Power is :- "+Math.pow(a,b), Toast.LENGTH\_SHORT).show();

}

});

avg.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

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

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

int c = (a+b)/2;

Toast.makeText(PowerAverage.this,"Average is :- "+c, Toast.LENGTH\_SHORT).show();

}

});

nxt.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

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

i.putExtra("Hi",msg.getText().toString());

startActivity(i);

}

});

}

}