EXPERIMENT 1

AIM

Develop an application that uses controls, size ,fonts and colors. Use 3 Buttons (RED, BLUE, GREEN) and a Text View with a Message.

PROGRAM

activity_main.xml

```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=".MainActivity">


        <TextView

        android:id="@+id/textView3"

        android:layout_width="97dp"

        android:layout_height="34dp"

        android:text="change the button color"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.456"
```

```
app:layout_constraintStart_toStartOf="parent"




app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.084" />


<Button

android:id="@+id/button4"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="RED"

android:onClick="color1"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.446"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.235" />


<Button

android:id="@+id/button5"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:text="BLUE"
```

```
        android:onClick="color1"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.446"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toBottomOf="@+id/textView3"

        app:layout_constraintVertical_bias="0.276" />


    <Button

        android:id="@+id/button6"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="GREEN"

        android:onClick="color1"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.446"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.499" />


    <TextView

        android:id="@+id/textView4"

        android:layout_width="88dp"
```

```
        android:layout_height="39dp"

        android:text="color change"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.442"

        app:layout_constraintStart_toStartOf="parent"


        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.656" />

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

MainActivity.java

```java
package com.example.project1;

import androidx.appcompat.app.AppCompatActivity;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

        TextView t1;

        Button b1,b2,b3;

        @Override

        protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        t1=(TextView) findViewById(R.id.textView4);

        b1=(Button) findViewById(R.id.button4);

        b2=(Button) findViewById(R.id.button5);

        b3=(Button) findViewById(R.id.button6);

    }

    public void color1(View view)

    {

        int viewid=view.getId();

        if(viewid==R.id.button4)

        {

            t1.setTextColor(Color.RED);

        }

        else if (viewid==R.id.button5)

        {

            t1.setTextColor(Color.BLUE);

        }

        else

        {

            t1.setTextColor(Color.GREEN);

        }

    }

}
```
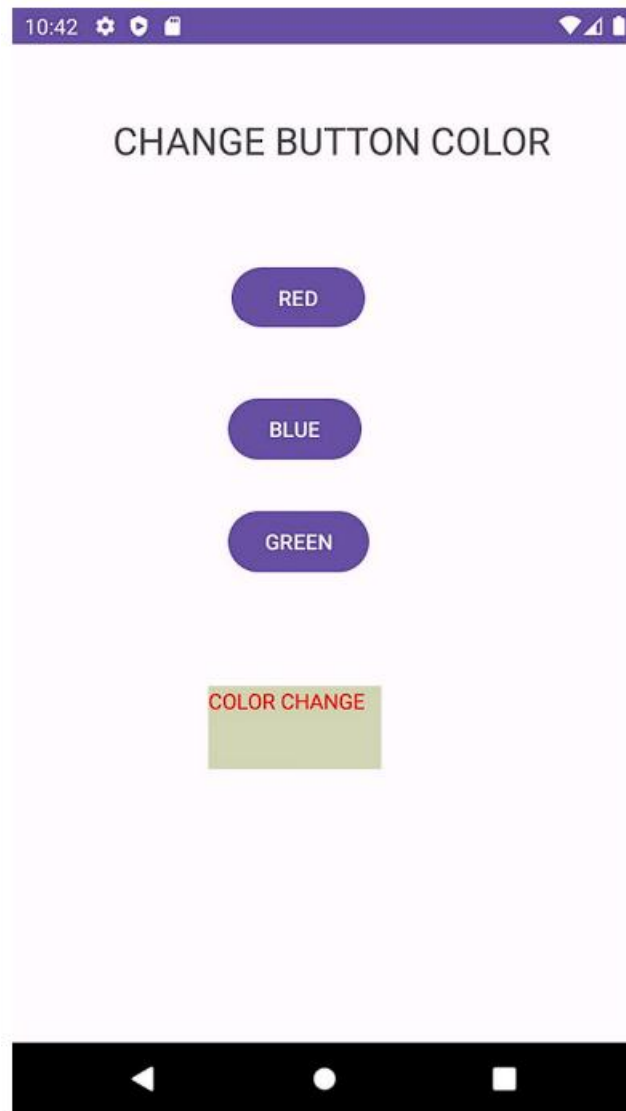
<u>OUTPUT</u>

EXPERIMENT 2

AIM

Develop an Android Application to generate a Fibonacci series of n numbers. Read n from user.

PROGRAM

activity_main.xml

```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=".MainActivity">


        <TextView

        android:id="@+id/textView"

        android:layout_width="174dp"

        android:layout_height="57dp"

        android:background="#F1A7A7"

        android:text="FIBONOCCI"

        android:textAlignment="center"
```

```
    android:textSize="24sp"

    android:textStyle="bold"

    app:layout_constraintTop_toTopOf="parent"

    app:layout_constraintVertical_bias="0.081" />


<TextView

    android:id="@+id/textView2"

    android:layout_width="150dp"

    android:layout_height="47dp"

    android:text="enter the number: "

    android:textAlignment="center"

    android:textSize="16sp"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintVertical_bias="0.248" />


<EditText

    android:id="@+id/editTextText"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:ems="10"

    android:hint="number"

    android:inputType="text"
```

```xml
        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="0.409" />


    <Button

        android:id="@+id/button"

        android:layout_width="104dp"

        android:layout_height="58dp"

        android:text="Button"

        android:onClick="fib"

        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="0.567" />


    <TextView

        android:id="@+id/textView4"

        android:layout_width="177dp"
```

```
        android:layout_height="66dp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.491"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.765" />

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

MainActivity.java

```
package com.example.fib;

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;

public class MainActivity extends AppCompatActivity {

        TextView t1;

        Button b1;

        EditText e1;

        @Override

        protected void onCreate(Bundle savedInstanceState) {
```

```
                super.onCreate(savedInstanceState);

                setContentView(R.layout.activity_main);

                t1=findViewById(R.id.textView4);

                e1=findViewById(R.id.editTextText);

                b1=findViewById(R.id.button);

        }
        public void fib(View view){

                Double n=Double.parseDouble(e1.getText().toString());

                int first = 0, second = 1;

                for (int i = 0; i < n; i++)

                int next = first + second;

                first = second;

                second = next;

        }
        t1.setText("Fibonacci Series: " + series.toString());

    }
}
```
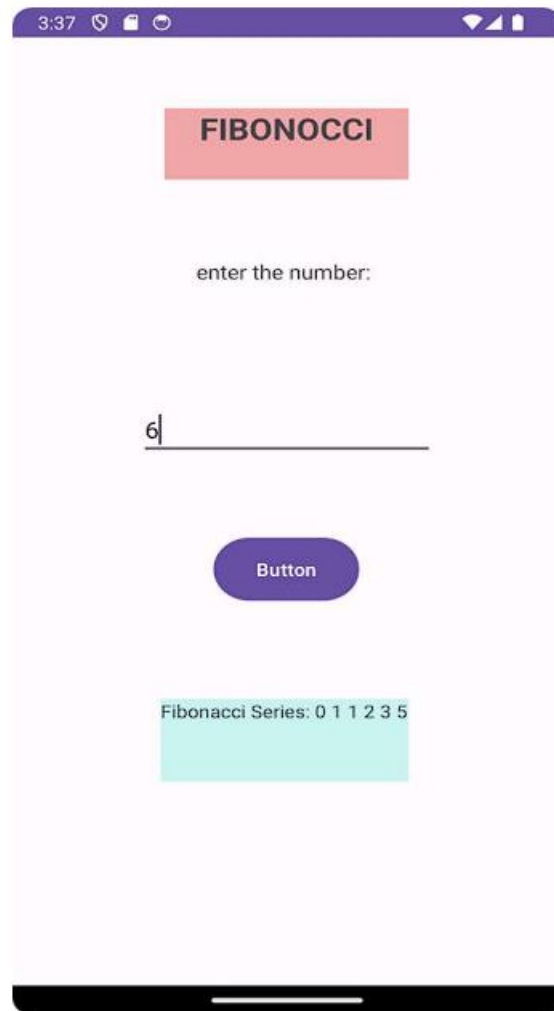
OUTPUT

EXPERIMENT 3

AIM

Develop an application to perform arithmetic operations like addition, subtraction, multiplication and division.

PROGRAM

activity_main.xml

```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:id="@+id/edit1"

        android:layout_width="match_parent"

        tools:context=".MainActivity">


        <TextView

        android:id="@+id/text1"

        android:layout_width="172dp"

        android:layout_height="49dp"

        android:text="CALCULATOR"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.071" />
```

```
<TextView

android:id="@+id/text3"

android:layout_width="120dp"

android:layout_height="42dp"

android:text="FRIST NUMBER"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.13"

app:layout_constraintVertical_bias="0.217" />


<TextView

android:id="@+id/textView7"

android:layout_width="120dp"

android:layout_height="42dp"

android:text="SECOND NUMBER:"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.139"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.338" />
```

```xml
<EditText

android:id="@+id/editTextText3"

android:layout_width="170dp"

android:layout_height="45dp"

android:ems="10"

android:hint="number1"

android:inputType="text"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.925"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.202" />


<EditText

android:id="@+id/editTextText4"

android:layout_width="170dp"

android:layout_height="45dp"

android:ems="10"

android:hint="number2"

android:inputType="text"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.925"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.325" />


<Button

android:id="@+id/button5"

android:layout_width="109dp"

android:layout_height="63dp"

android:text="ADD"

android:onClick="add"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.559" />


<Button

android:id="@+id/button6"

android:layout_width="109dp"

android:layout_height="63dp"

android:text="MUL"

android:onClick="mul"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"/>
```

```xml
<Button

android:id="@+id/button7"

android:layout_width="109dp"

android:layout_height="63dp"

android:text="SUB"

android:onClick="sub"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.718" />


<Button

android:id="@+id/button8"

android:layout_width="109dp"

android:layout_height="63dp"

android:text="DIV"

android:onClick="div"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.788"

app:layout_constraintStart_toStartOf="parent"

app:layout_constraintTop_toTopOf="parent"

app:layout_constraintVertical_bias="0.718" />
```

```xml
        <TextView

        android:id="@+id/textView8"

        android:layout_width="106dp"

        android:layout_height="36dp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.867" />

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

MainActivity.java

```java
package com.example.record2;

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;

public class MainActivity extends AppCompatActivity {

        Button b1,b2,b3,b4;

        TextView t1;

        EditText e1,e2;

        @Override

        protected void onCreate(Bundle savedInstanceState) {
```

```java
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        t1=findViewById(R.id.textView8);

        e1=findViewById(R.id.editTextText3);

        e2=findViewById(R.id.editTextText4);
    }
    public void add(View v){

        t1.setText("ADDITION: ");

        Double a,b,sum;

        a=Double.parseDouble(e1.getText().toString());

        b=Double.parseDouble(e2.getText().toString());

        sum=a+b;
    }
    public void sub(View v){

        t1.setText("SUBSTRACTION: ");

        Double a,b,sub;

        a=Double.parseDouble(e1.getText().toString());

        b=Double.parseDouble(e2.getText().toString());

        sub=a-b;
    }
    public void mul(View v){

        t1.setText("MULTI: ");

        Double a,b,mul;
```
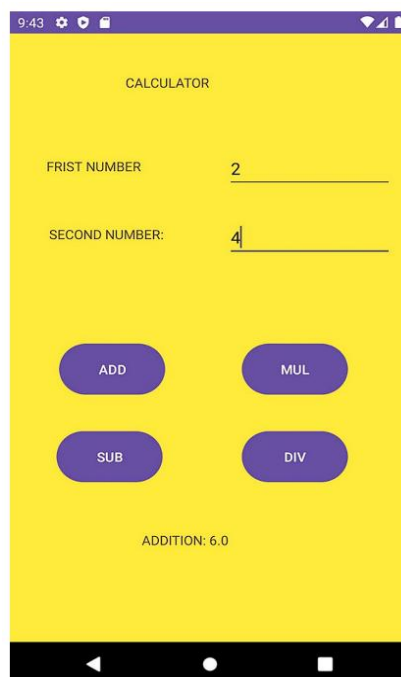
```
                a=Double.parseDouble(e1.getText().toString());

                b=Double.parseDouble(e2.getText().toString());

                mul=a*b;

        }

        public void div(View v)

        {

                t1.setText("DIVISION: ");

                Double a,b,div;

                a=Double.parseDouble(e1.getText().toString());

                b=Double.parseDouble(e2.getText().toString());

                div=a/b;

        }

}
```

OUTPUT

EXPERIMENT 4

AIM

Develop a Login application. If user name is correct, then Greet the user else display an error Message.

PROGRAM

activity_main.xml

```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=".MainActivity">


        <TextView

        android:id="@+id/textView"

        android:layout_width="123dp"

        android:layout_height="49dp"

        android:background="#EA7FA3"

        android:text="LOGIN "

        android:textSize="20sp"
```

```xml
        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.09" />


    <TextView

        android:id="@+id/textView2"

        android:layout_width="126dp"

        android:layout_height="39dp"

        android:text="LOGIN"

        android:textSize="20sp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.252" />


    <EditText

        android:id="@+id/editTextText"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:ems="10"

        android:inputType="text"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.244" />
```

```xml
<TextView

android:id="@+id/textView3"

android:layout_width="127dp"

android:layout_height="38dp"

android:text="PASSWORD"

android:textSize="20sp"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintHorizontal_bias="0.052"

app:layout_constraintVertical_bias="0.401" />


<EditText

android:id="@+id/editTextText2"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:ems="10"

android:inputType="text"

app:layout_constraintBottom_toBottomOf="parent"

app:layout_constraintEnd_toEndOf="parent"

app:layout_constraintVertical_bias="0.395" />


<Button

android:id="@+id/button"
```

```
        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:onClick="butt"

        android:text="Button"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.651" />

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

MainActivity.java

```
package com.example.app3;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

import android.content.Context;

import android.content.Intent;

import android.os.Bundle;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements OnClickListener {

        EditText e1,e2;

        Button b1;

        Intent ie;

        @Override
```

```java
    protected void onCreate(Bundle savedInstanceState){

            super.onCreate(savedInstanceState);

            setContentView(R.layout.activity_main);

            e1=findViewById(R.id.editTextText);

            e2=findViewById(R.id.editTextText2);

            b1=findViewById(R.id.button);

    }

    @Override

    public void onClick(View v) {

            String user = e1.getText().toString();

            String pass = e2.getText().toString();

            if (user.equals("Anakin") && (pass.equals("Padme"))) {

            Toast.makeText(this, "login succesful", Toast.LENGTH_LONG).show();

            }

        else {

            Toast.makeText(this, "error", Toast.LENGTH_LONG).show();

        }

    }

}
```
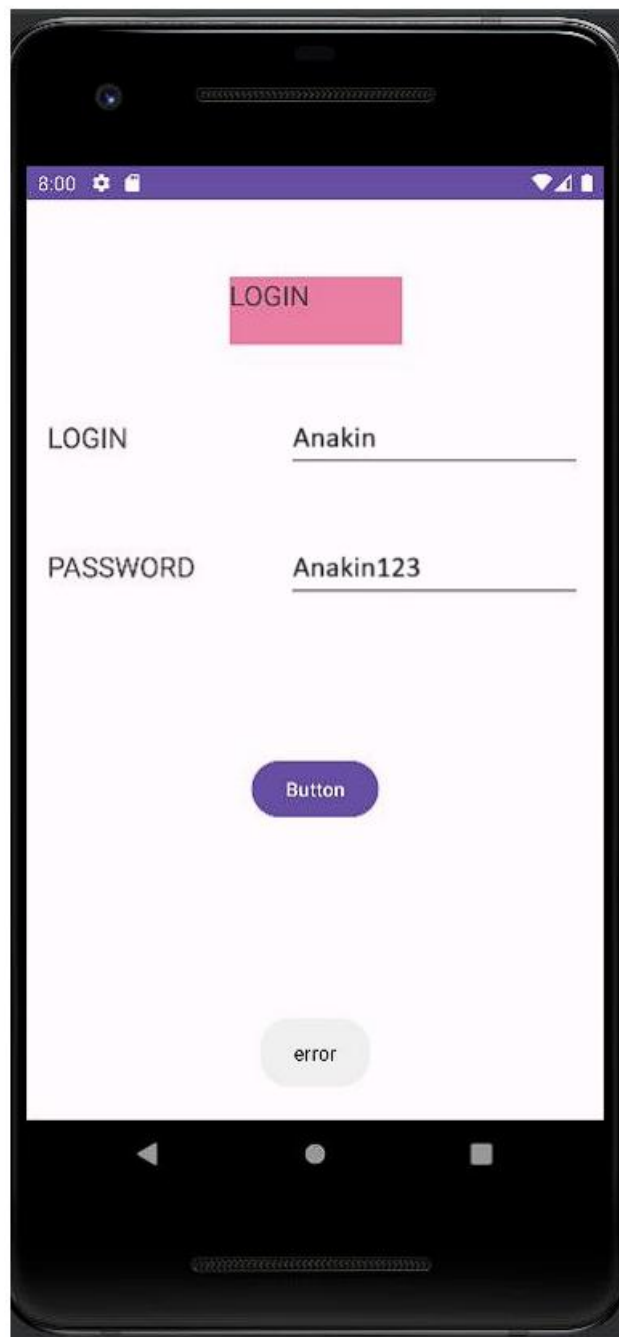
OUTPUT

EXPERIMENT 5

AIM

Develop an app to display an image in an activity.

PROGRAM

activity_main.xml

```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"

        tools:context=".MainActivity">


        <ImageView

        android:id="@+id/img"

        android:layout_width="241dp"

        android:layout_height="504dp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:srcCompat="@drawable/mink_mingle_96jd67agnge_unsplash" />


        <Button

        android:id="@+id/b1"
```

```
        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="CHANGE IMAGE"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.86" />

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

MainActivity.java

```java
package com.example.imageview;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener {

        Button b1;

        ImageView img;

        @SuppressLint("MissingInflatedId")

        @Override

        protected void onCreate(Bundle savedInstanceState) {

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

                b1.setOnClickListener(this);

                img=(ImageView)findViewById(R.id.img);

        }

        @Override
```

```
        public void onClick(View view) {

                img.setImageResource(R.drawable.flower);

        }

}
```

OUTPUT

EXPERIMENT 6

AIM

Develop an app to move to from one activity to another.

PROGRAM

activity_main.xml

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

<androidx.constraintlayout.widget.ConstraintLayout

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

        android:layout_width="match_parent"

        android:layout_height="match_parent"

        tools:context=".MainActivity">


        <Button

        android:id="@+id/button"

        android:layout_width="197dp"

        android:layout_height="66dp"

        android:text="Go to next Activity"

        android:onClick="onClick"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintTop_toTopOf="parent" />

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

MainActivity.java

```java
package com.example.activity;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener{

    Intent ie;

    Button b;

    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        b=findViewById(R.id.button);

        b.setOnClickListener(this);

    }
    @Override
    public void onClick(View view) {

        ie=new Intent(MainActivity.this, newactvty.class);

        startActivity(ie);

} }
```

Activity_newactvty.xml

```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=".newactvty">


        <TextView

        android:id="@+id/textView"

        android:layout_width="261dp"

        android:layout_height="73dp"

        android:text="This is the new activity"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.437" />

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

newactvty.java

```java
package com.example.activity;

import androidx.appcompat.app.AppCompatActivity;
```

```java
import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

public class newactvty extends AppCompatActivity implements

View.OnClickListener {

        Intent ie1;

        TextView t1;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);

                setContentView(R.layout.activity_newactvty);

        }

        @Override

        public void onClick(View view) {

                ie1=new Intent(newactvty.this,MainActivity.class);

                startActivity(ie1);

        }

}
```
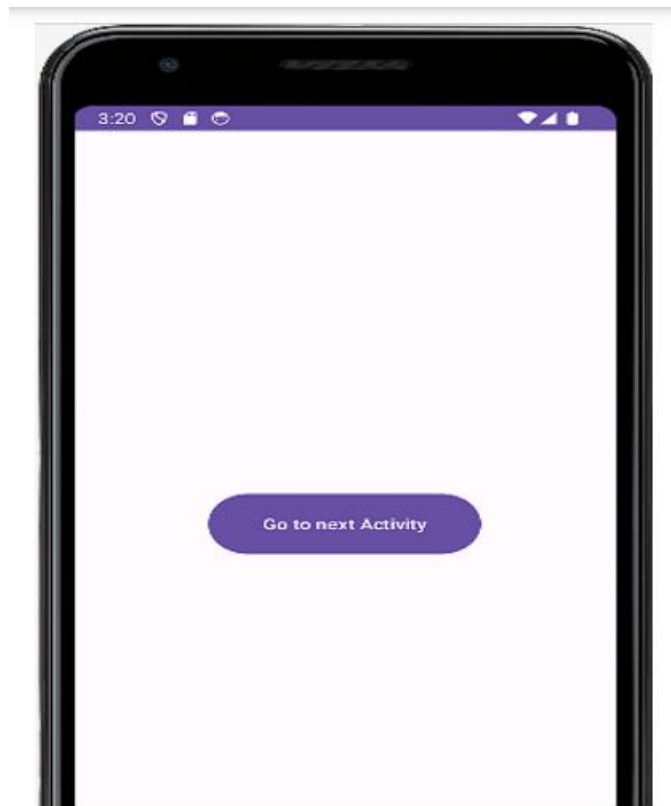
OUTPUT
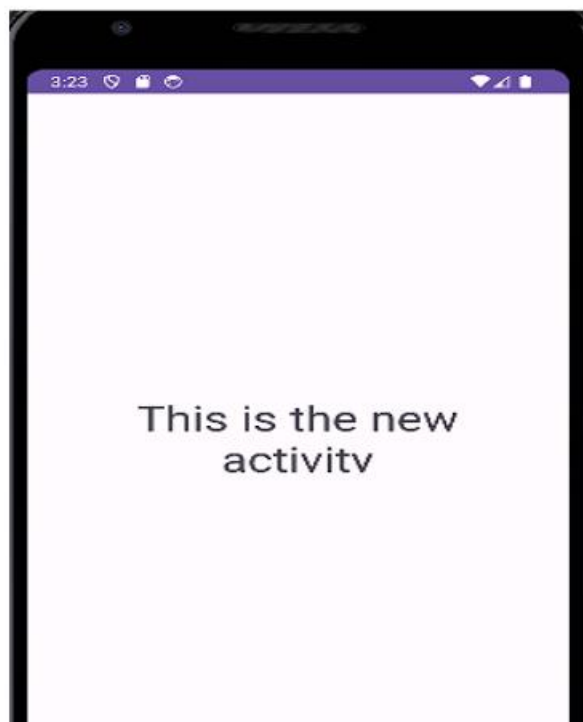
EXPERIMENT 7

AIM

Develop an application to pass values between activities. Read 3 no.s in One activity. Pass these values to another activity display sum and average of these numbers.

PROGRAM

activity_main.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=".MainActivity">

        <TextView

         android:id="@+id/textView"

         android:layout_width="158dp"

         android:layout_height="57dp"

         android:background="#83B8E3"

         android:text="SUM OF NUMBERS"

         app:layout_constraintBottom_toBottomOf="parent"
```

```xml
        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.1" />


    <EditText

    android:id="@+id/editTextText"

     android:layout_width="wrap_content"

     android:layout_height="wrap_content"

     android:ems="10"

     android:hint="ENTER NUMBER1:"

     android:inputType="text"

     app:layout_constraintBottom_toBottomOf="parent"

     app:layout_constraintVertical_bias="0.259" />


    <EditText

     android:id="@+id/editTextText2"

     android:layout_width="wrap_content"

     android:layout_height="wrap_content"

     android:ems="10"

     android:hint="ENTER NUMBER2:"

     android:inputType="text"

     app:layout_constraintBottom_toBottomOf="parent"

     app:layout_constraintVertical_bias="0.419" />
```

```xml
    <EditText

    android:id="@+id/editTextText3"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:ems="10"

    android:hint="ENTER NUMBER3:"

    app:layout_constraintEnd_toEndOf="parent"

    app:layout_constraintHorizontal_bias="0.497"

    app:layout_constraintVertical_bias="0.567" />


    <Button

    android:id="@+id/button"

    android:layout_width="119dp"

    android:layout_height="55dp"

    android:text="SUM"

    android:onClick="onClick"

    app:layout_constraintBottom_toBottomOf="parent"

    app:layout_constraintVertical_bias="0.748" />

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

MainActivity.java

```java
package com.example.app1;

import androidx.appcompat.app.AppCompatActivity;
```

```java
import android.content.Intent;

import android.os.Bundle;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener {

        EditText e1,e2,e3;

        Button b1;

        Intent intent;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);

                setContentView(R.layout.activity_main);

                e1=findViewById(R.id.editTextText);

                e2=findViewById(R.id.editTextText2);

                e3=findViewById(R.id.editTextText3);

                b1=findViewById(R.id.button);

        }

        @Override

        public void onClick(View view) {

                double num1=Double.parseDouble(e1.getText().toString());

                double num2=Double.parseDouble(e2.getText().toString());

                double num3=Double.parseDouble(e3.getText().toString());
```

```
                Toast.makeText(this,"Have a Good

            day"+num1,Toast.LENGTH_LONG).show();

             intent.putExtra("num1:",num1);

             intent.putExtra("num2:",num2);

             intent.putExtra("num3:",num3);

             startActivity(intent);

        }

    }
```

activity_main2.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=".app2">


        <TextView

         android:id="@+id/textView2"

         android:layout_width="134dp"

         android:layout_height="48dp"

         android:text="RESULT"
```

```
        android:textSize="24sp"

        android:textStyle="bold"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.089" />


    <TextView

        android:id="@+id/textView3"

        android:layout_width="186dp"

        android:layout_height="65dp"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.31" />


    <TextView

        android:id="@+id/textView4"

        android:layout_width="184dp"

        android:layout_height="74dp"

        app:layout_constraintTop_toTopOf="parent" />


    <Button

        android:id="@+id/button2"

        android:layout_width="121dp"
```

```xml
        android:layout_height="51dp"

        android:text="GO BACK"

        android:onClick="back"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintVertical_bias="0.704" />

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

app2.java

```java
package com.example.app1;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.widget.TextView;

import android.widget.Toast;

public class app2 extends AppCompatActivity {

        TextView t1,t2;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);

                setContentView(R.layout.activity_app2);

                t1=findViewById(R.id.textView3);

                t2=findViewById(R.id.textView4);

                double num1 = intent.getDoubleExtra("num1", 0.0);
```

```
                double num2 = intent.getDoubleExtra("num2", 0);

                double num3 = intent.getDoubleExtra("num3", 0);

                Toast.makeText(this,"Have a Good

                day"+num1,Toast.LENGTH_LONG).show();

                double sum = num1 + num2 + num3;

                double average = sum / 3;

                t1.setText("Sum: " + sum);

                t2.setText("Average: " + average);

        }
        public void back(){

                Intent ie = new Intent(getApplicationContext(), MainActivity.class);

                startActivity(ie);

        }
}       }
```
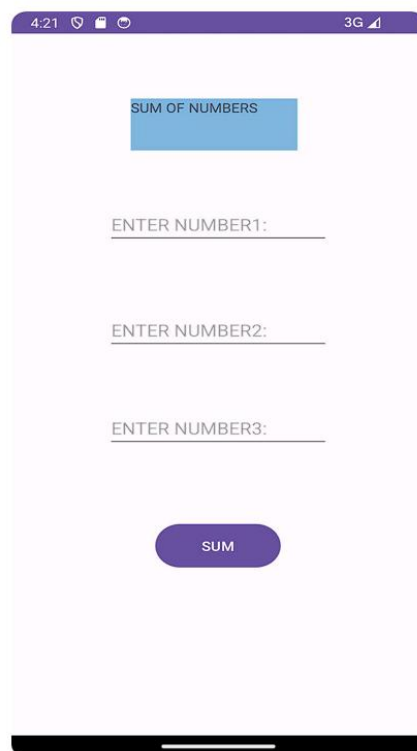
OUTPUT

EXPERIMENT 8

AIM

Develop an App to show the use of Implicit Intents.

PROGRAM

activity_main.xml

```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=".MainActivity">

        <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="butt"
        android:text="OPEN BROWSER"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.651" />
</androidx.constraintlayout.widget.ConstraintLayout>
```
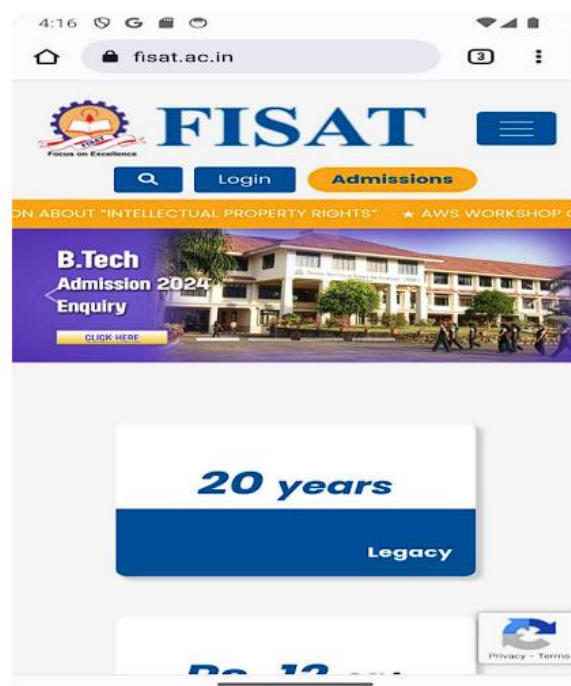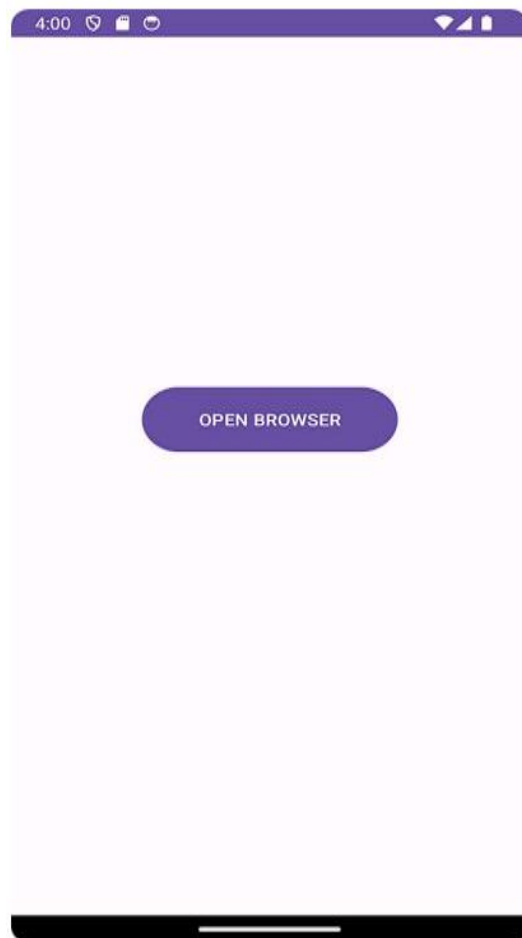
MainActivity.java

```java
package com.example.implicit;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
```

```java
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
        Button b1;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);
                b1=findViewById(R.id.button);
        }
        public void open(View v)
        {
        Intent i=new Intent(Intent.ACTION_VIEW, Uri.parse( "https://fisat.ac.in/ ") );
        startActivity(i);
        }
}
```

OUTPUT

EXPERIMENT 9

AIM

Implement Options Menu , Context menu and Popup Menu to navigate between activities.

PROGRAM

OPTIONS MENU:

Main_activity.java

```java
package com.example.optionmenu;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);

    }

    public boolean onCreateOptionsMenu(Menu menu) {

    MenuInflater inflater = getMenuInflater();

    inflater.inflate(R.menu.menu_example, menu);
```

```java
return true;

}

public boolean onOptionsItemSelected(MenuItem item) {

//respond to menu item selection

switch (item.getItemId()) {

case R.id.about:

Toast.makeText(this, "You have selected About Option",

Toast.LENGTH_LONG).show();

return true;

case R.id.help:

Toast.makeText(this, "You have selected Help Option",

Toast.LENGTH_LONG).show();

return true;

default:

return super.onContextItemSelected(item);

}

}

}
```
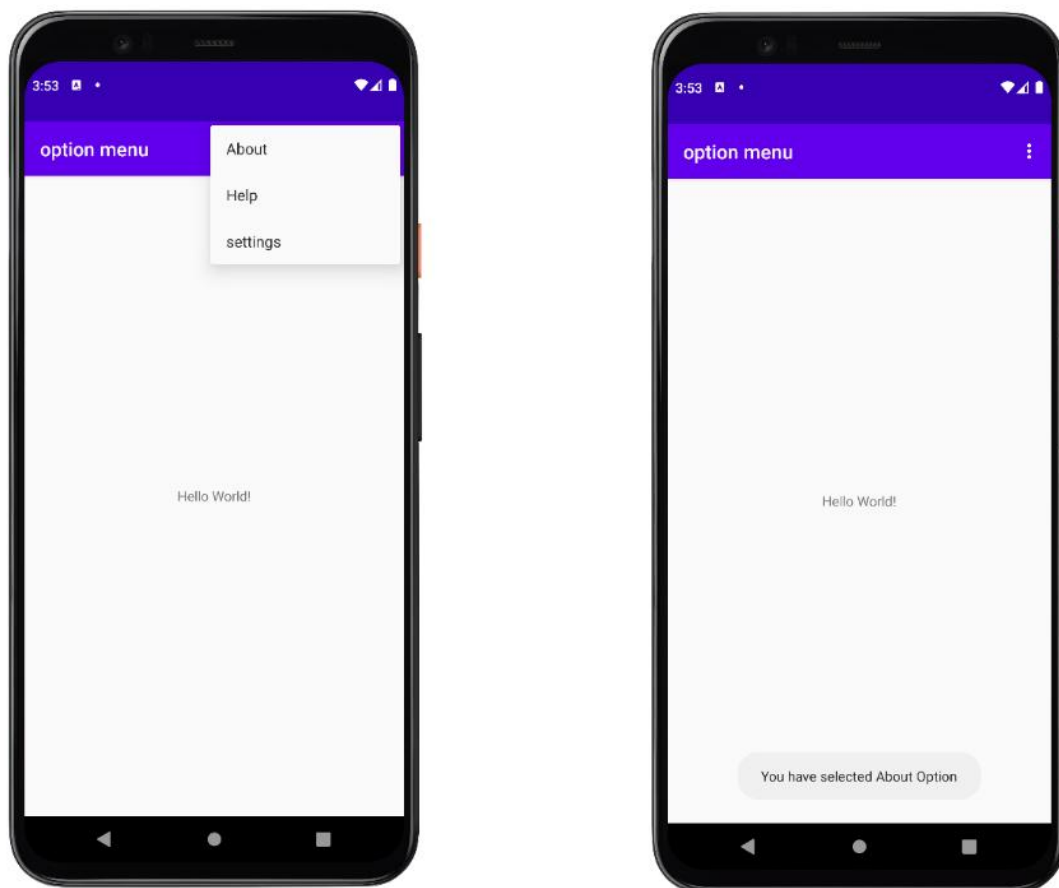
menu_example.xml

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

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

        <item android:id="@+id/about"

        android:title="About" />
```

```
        <item android:id="@+id/help"

        android:title="Help" />

        <item android:id="@+id/settings"

        android:title="Help" />

</menu>
```

OUTPUT

CONTEXT MENU:

Main_activity.java

```java
package com.example.optionmenu;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    Button btn;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    btn = (Button) findViewById(R.id.btnclick);

    registerForContextMenu(btn);

    super.onCreateContextMenu(menu, v, menuInfo); MenuInflater inflater =

    getMenuInflater();

    inflater.inflate(R.menu.menu_example, menu);

    }

    public boolean onContextItemSelected(MenuItem item) {

    Toast.makeText(this, "Selected Item: " +item.getTitle(),
```

```
        Toast.LENGTH_SHORT).show();

        return true;

        }

    }
```

menu_example.xml

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

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

        <item android:id="@+id/upload"

        android:title="upload" />

        <item android:id="@+id/search"

        android:title="search" />

        <item android:id="@+id/share"

        android:title="share" />

        <item android:id="@+id/bookmark"

        android:title="bookmark" />

</menu>
```

OUTPUT

POPUP MENU:

Main_activity.xml

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.PopupMenu;

import android.widget.Toast;

```
public class MainActivity extends AppCompatActivity {

    Button button;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);

    button = (Button) findViewById(R.id.clickBtn);

    button.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View view) {

    PopupMenu popupMenu = new

    PopupMenu(MainActivity.this, button)

    popupMenu.getMenuInflater().inflate(R.menu.popup_menu,

    popupMenu.getMenu());

    popupMenu.setOnMenuItemClickListener(new

    PopupMenu.OnMenuItemClickListener() {

    @Override

    public boolean onMenuItemClick(MenuItem menuItem) {

    Toast.makeText(MainActivity.this, "You Clicked " + menuItem.getTitle(),

    Toast.LENGTH_SHORT).show();

    return true;

    }

    });
```

```
        popupMenu.show();

        }

        });

        }

}
```

Menu_example.xml

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

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

        <item

        android:id="@+id/java"

        android:title="Java" />

        <item

        android:id="@+id/kotlin"

        android:title="Kotlin" />

        <item

        android:id="@+id/android"

        android:title="Android" />

        <item

        android:id="@+id/react_native"

        android:title="React Native" />

</menu>
```

Activity_main.xml:

```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=".MainActivity">

        <Button

        android:id="@+id/clickBtn"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:background="#0F9D58"

        android:text="Click Me"

        android:textColor="#ffffff"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintLeft_toLeftOf="parent"

        app:layout_constraintRight_toRightOf="parent"

        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```
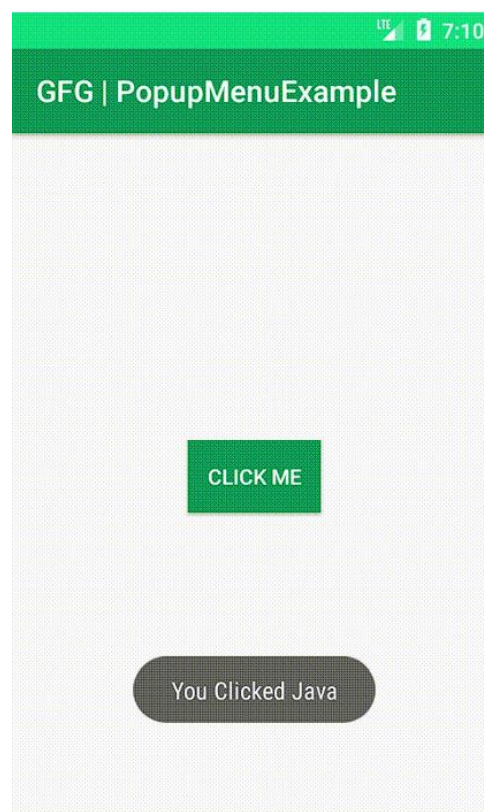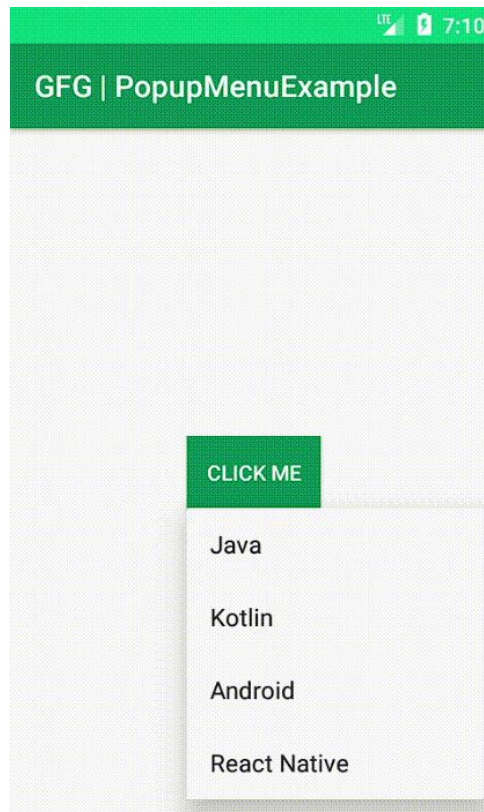
OUTPUT

EXPERIMENT 10

AIM

Write a program to implement Toggle Button.

PROGRAM

Main_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=".MainActivity">


        <TextView

        android:id="@+id/textView"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="Toggle Button"

        android:textColor="@color/navy"

        android:textSize="30sp"

        android:textStyle="bold"
```

```xml
        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="0.114" />


    <ToggleButton

        android:id="@+id/togglebtn"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:text="ToggleButton"

        android:textOn="ON"

        android:textOff="OFF"

        android:textSize="25sp"

        android:textColor="@color/blue"

        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="0.338" />

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

Activity_main.java

```java
package com.example.toggle_pro;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.CompoundButton;

import android.widget.TextView;

import android.widget.Toast;

import android.widget.ToggleButton;

public class MainActivity extends AppCompatActivity {

        ToggleButton togglebtn;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);

                setContentView(R.layout.activity_main);

                togglebtn = (ToggleButton) findViewById(R.id.togglebtn);

                togglebtn.setOnCheckedChangeListener(new

                CompoundButton.OnCheckedChangeListener() {

                @Override

                public void onCheckedChanged(CompoundButton buttonView, boolean
isChecked) {

                if(isChecked){

                Toast.makeText(getApplicationContext(),"Toggle

                ON",Toast.LENGTH_LONG).show();

                }
```
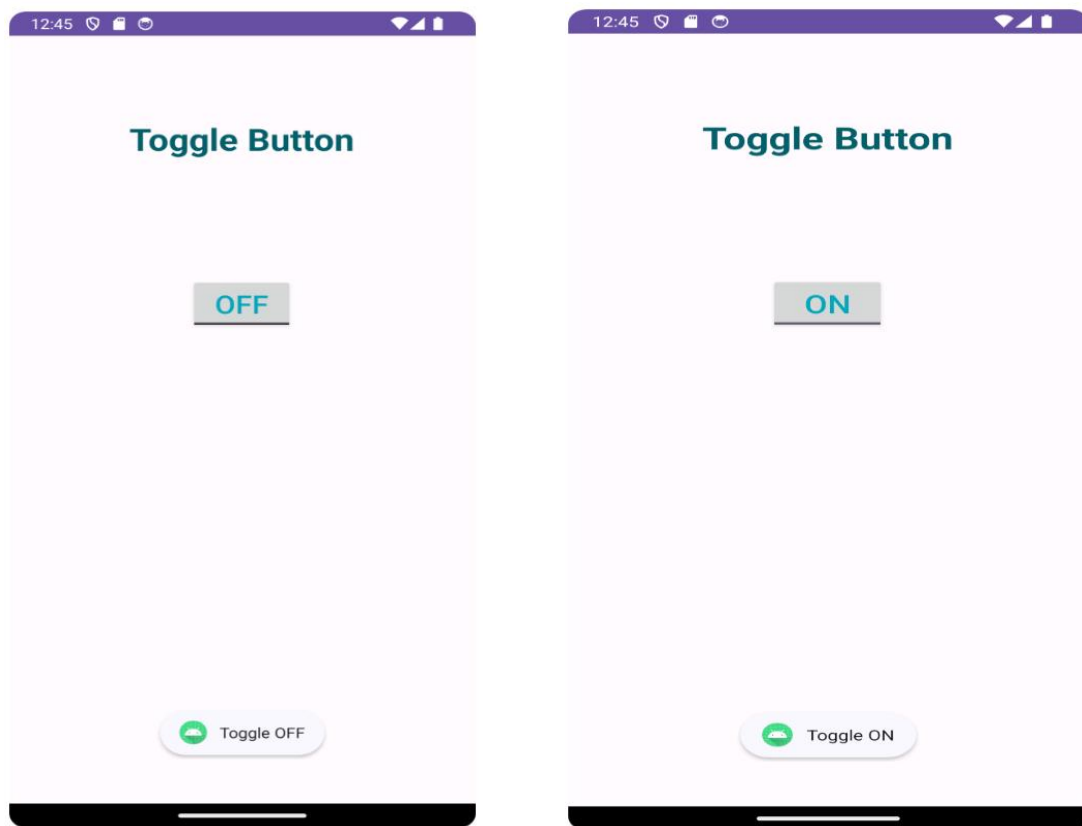
```
        else{

        Toast.makeText(getApplicationContext(),"Toggle

        OFF",Toast.LENGTH_LONG).show();

        }

        }

        });

    }

}
```

OUTPUT

EXPERIMENT 11

AIM

Create a database application using SQLite and perform INSERT, DELETE, UPDATE, and SELECT operations.

PROGRAM

activity_main.xml

```
import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.app.AlertDialog.Builder;

public class MainActivity extends AppCompatActivity implements

View.OnClickListener {

        EditText rno;

        EditText name;

        EditText mark;

        Button btnAdd,btnDelete,btnModify,btnView,btnViewAll;

        SQLiteDatabase db;
```

```java
@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);

rno=(EditText)findViewById(R.id.edtrollno);

name=(EditText)findViewById(R.id.edtname);

mark=(EditText)findViewById(R.id.edtMark);

btnAdd=(Button)findViewById(R.id.btnadd);

btnDelete=(Button)findViewById(R.id.btndelete);

btnModify=(Button)findViewById(R.id.btnmodify);

btnView=(Button)findViewById(R.id.btnview);

btnViewAll=(Button)findViewById(R.id.btnviewall);

btnAdd.setOnClickListener(this);

btnDelete.setOnClickListener(this);

btnModify.setOnClickListener(this);

btnView.setOnClickListener(this);

btnViewAll.setOnClickListener(this);

db=openOrCreateDatabase("StudentDB", Context.MODE_PRIVATE, null);

db.execSQL("CREATE TABLE IF NOT EXISTS student(rollno

VARCHAR,name VARCHAR,marks VARCHAR);");

}

@Override

public void onClick(View view) {
```

```
if(view==btnAdd){

if(rno.getText().toString().trim().length()==0||

name.getText().toString().trim().length()==0||

mark.getText().toString().trim().length()==0){

showMessage("Error", "Please enter all values");

return;

}

db.execSQL("INSERT INTO student

VALUES('"+rno.getText()+"','"+name.getText()+

"','"+mark.getText()+"');");

showMessage("Success", "Record added");

clearText();

}

if(view==btnDelete){

if(rno.getText().toString().trim().length()==0){

showMessage("Error", "Please enter Roll no");

return;

}

Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

if(c.moveToFirst()){

db.execSQL("DELETE FROM student WHERE

rollno='"+rno.getText()+"'");
```

```
showMessage("Success", "Record Deleted");

}

else{

showMessage("Error", "Invalid Roll no");

}

clearText();

c.close();

}

if(view==btnModify){

if(rno.getText().toString().trim().length()==0){

showMessage("Error", "Please enter Roll no");

return;

}

Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

if(c.moveToFirst()){

db.execSQL("UPDATE student SET

name='"+name.getText()+"',marks='"+mark.getText()+

"' WHERE rollno='"+rno.getText()+"'");

showMessage("Success", "Record Modified");

}

else{

showMessage("Error", "Invalid Roll no");
```

```
        }

        clearText();

     c.close();

        }

     if(view==btnView) {

     if(rno.getText().toString().trim().length()==0) {

     showMessage("Error", "Please enter Roll no");

     return;

        }

     Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

     if(c.moveToFirst()){

     name.setText(c.getString(1));

     mark.setText(c.getString(2));

        }

     else {

     showMessage("Error", "Invalid Roll no");

     clearText();

     c.close();

        }

        }

     if(view==btnViewAll) {

     Cursor c=db.rawQuery("SELECT * FROM student", null);

     if(c.getCount()==0) {
```

```java
        return;

        }

        StringBuilder buffer=new StringBuilder();

        while(c.moveToNext()) {

        buffer.append("Roll No: ").append(c.getString(0)).append("\n");

        buffer.append("Name: ").append(c.getString(1)).append("\n");

        buffer.append("Marks: ").append(c.getString(2)).append("\n\n");

        }

        c.close();

        showMessage("Student Details", buffer.toString());

        }

        }

        public void showMessage(String title,String message) {

        Builder builder=new Builder(this);

        builder.setCancelable(true);

        builder.setTitle(title);

        builder.setMessage(message);

        builder.show();

        }

        public void clearText() {

        rno.setText("");

        name.setText("");

        mark.setText("");
```

```
            rno.requestFocus();

        }

    }
```

Strings.xml

```xml
<resources>

 <string name="app_name">dbms</string>

 <string name="rollno" />

 <string name="rno" />

 <string name="name" />

 <string name="mark" />

 <string name="studentmark" />

 <string name="add" />

 <string name="delete" />

 <string name="view" />

 <string name="viewall" />

</resources>
```

MainActivity.java

```java
package com.example.dbms;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;
```

```java
import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.app.AlertDialog.Builder;

public class MainActivity extends AppCompatActivity implements

View.OnClickListener {

        EditText rno;

        EditText name;

        EditText mark;

        Button btnAdd,btnDelete,btnModify,btnView,btnViewAll;

        SQLiteDatabase db;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        rno=(EditText)findViewById(R.id.edtrollno);

        name=(EditText)findViewById(R.id.edtname);

        mark=(EditText)findViewById(R.id.edtMark);

        btnAdd=(Button)findViewById(R.id.btnadd);

        btnDelete=(Button)findViewById(R.id.btndelete);

        btnModify=(Button)findViewById(R.id.btnmodify);

        btnView=(Button)findViewById(R.id.btnview);
```

```
btnViewAll=(Button)findViewById(R.id.btnviewall);

btnAdd.setOnClickListener(this);

btnDelete.setOnClickListener(this);

btnModify.setOnClickListener(this);

btnView.setOnClickListener(this);

btnViewAll.setOnClickListener(this);

db=openOrCreateDatabase("StudentDB", Context.MODE_PRIVATE, null);

db.execSQL("CREATE TABLE IF NOT EXISTS student(rollno

VARCHAR,name VARCHAR,marks VARCHAR);");

}

@Override

public void onClick(View view) {

if(view==btnAdd) {

if(rno.getText().toString().trim().length()==0||

name.getText().toString().trim().length()==0||

mark.getText().toString().trim().length()==0) {

showMessage("Error", "Please enter all values");

return;

}

db.execSQL("INSERT INTO student

VALUES('"+rno.getText()+"','"+name.getText()+

"','"+mark.getText()+"');");

showMessage("Success", "Record added");

clearText();
```

```
    }

    if(view==btnDelete) {

    if(rno.getText().toString().trim().length()==0) {

    showMessage("Error", "Please enter Roll no");

return;

    }

    Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

    if(c.moveToFirst()) {

    db.execSQL("DELETE FROM student WHERE

rollno='"+rno.getText()+"'");

    showMessage("Success", "Record Deleted");

    }

    else {

    showMessage("Error", "Invalid Roll no");

    }

    clearText();

    c.close();

    }

    if(view==btnModify) {

    if(rno.getText().toString().trim().length()==0) {

    showMessage("Error", "Please enter Roll no");

    return;

    }
```

```
Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

if(c.moveToFirst()) {

db.execSQL("UPDATE student SET

name='"+name.getText()+"',marks='"+mark.getText()+

"' WHERE rollno='"+rno.getText()+"'");

showMessage("Success", "Record Modified");

}

else {

showMessage("Error", "Invalid Roll no");

}

clearText();

c.close();

}

if(view==btnView) {

if(rno.getText().toString().trim().length()==0) {

showMessage("Error", "Please enter Roll no");

return;

}

Cursor c=db.rawQuery("SELECT * FROM student WHERE

rollno='"+rno.getText()+"'", null);

if(c.moveToFirst()) {

name.setText(c.getString(1));

mark.setText(c.getString(2));
```

```
    }

    else {

    showMessage("Error", "Invalid Roll no");

    clearText();

    c.close();

    }

    }

    if(view==btnViewAll) {

    Cursor c=db.rawQuery("SELECT * FROM student", null);

    if(c.getCount()==0) {

    return;

    }

    StringBuilder buffer=new StringBuilder();

    while(c.moveToNext()) {

    buffer.append("Roll No: ").append(c.getString(0)).append("\n");

    buffer.append("Name: ").append(c.getString(1)).append("\n");

    buffer.append("Marks: ").append(c.getString(2)).append("\n\n");

    }

    c.close();

    showMessage("Student Details", buffer.toString());

    }

    }

    public void showMessage(String title,String message) {

    Builder builder=new Builder(this);
```

```
        builder.setCancelable(true);

        builder.setTitle(title);

        builder.setMessage(message);

        builder.show();

        }

        public void clearText() {

        rno.setText("");

        name.setText("");

        mark.setText("");

        rno.requestFocus();

        }

    }
```
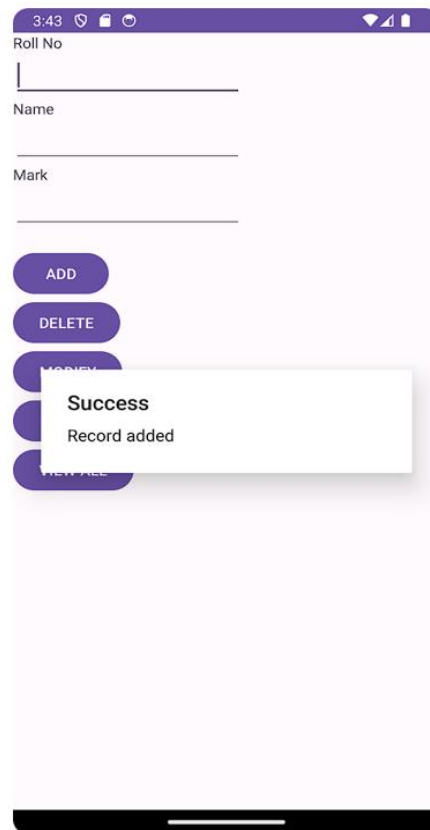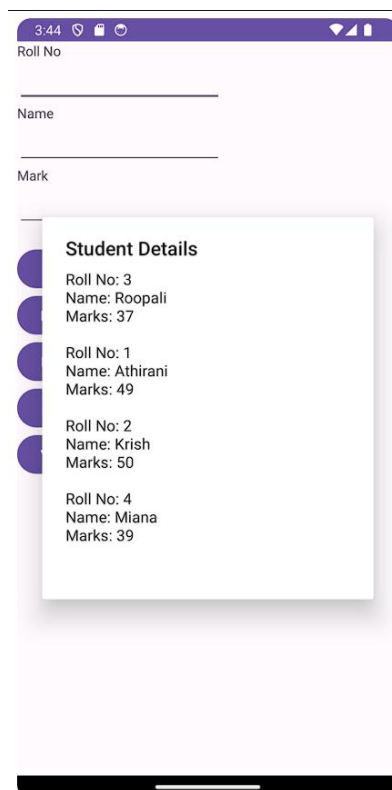
EXPERIMENT 12

AIM

Develop an option menu with 2 options to do the following in two different activities. To greet the user and To add two numbers.

Note: Get the Username and numbers from user

PROGRAM

Menuu.xml

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

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

    <item

    android:id="@+id/greet" android:title="greet"/>

    <item android:title="add"

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

</menu>
```

MainActivity.java

```java
package com.example.option2activity;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.view.View;
```

```java
import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements

View.OnClickListener {

        TextView t1;

        Intent ie;

        @Override

        public boolean onCreateOptionsMenu(Menu menu) {

        MenuInflater inflater=getMenuInflater();

        inflater.inflate(R.menu.menuu,menu);

        return true;

        }

        @Override

        public boolean onOptionsItemSelected(@NonNull MenuItem item) {

        int iditem= item.getItemId();

        if(iditem==R.id.greet)

        {

        ie=new Intent(MainActivity.this,one.class);

        startActivity(ie);

        return true;

        }

        if(iditem==R.id.add)

        {

        ie=new Intent(MainActivity.this,two.class);
```

```
        startActivity(ie);

        return true;

        }

        return true;

        }

        @Override

        protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        }

        @Override

        public void onClick(View v) {

        }

}
```

activity_one.xml

```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=".one">
```

```xml
<TextView
    android:id="@+id/textView2"
    android:layout_width="230dp"
    android:layout_height="54dp"
    android:text="LOGIN"
    android:textAlignment="center"
    android:textSize="25dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.1" />
<EditText
    android:id="@+id/editTextText"
    android:layout_width="294dp"
    android:layout_height="86dp"
    android:ems="10"
    android:inputType="text"
    android:hint="Enter username"
    android:textAlignment="center"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.495"
    app:layout_constraintStart_toStartOf="parent"
```

```
        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.409" />

      <Button

        android:id="@+id/button"

        android:layout_width="144dp"

        android:layout_height="67dp"

        android:text="submit"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintHorizontal_bias="0.468"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.682" />

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

One.java

```java
package com.example.option2activity;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class one extends AppCompatActivity implements View.OnClickListener {
```

```java
        EditText e1;

        Button b1;

        @Override

        protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_one);

        e1=findViewById(R.id.editTextText);

        b1=findViewById(R.id.button);

        }

        @Override

        public void onClick(View v) {

        String user=e1.getText().toString();

        if(user.equals("Athirani"))

        {

        Toast.makeText(this,"login succesfull",Toast.LENGTH_LONG).show();

        }

        else

        {

        Toast.makeText(this,"error",Toast.LENGTH_LONG).show();

        }

        }

    }
```

activity_two.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=".two">

        <TextView

        android:id="@+id/textView3"

        android:layout_width="242dp"

        android:layout_height="59dp"

        android:text="Addition of two numbers"

        android:textAlignment="center"

        android:textSize="20dp"

        android:textStyle="bold"

        app:layout_constraintBottom_toBottomOf="parent"

        app:layout_constraintEnd_toEndOf="parent"

        app:layout_constraintStart_toStartOf="parent"

        app:layout_constraintTop_toTopOf="parent"

        app:layout_constraintVertical_bias="0.078" />

        <EditText
```

```xml
        android:id="@+id/editTextText2"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:ems="10"

    android:inputType="text"

        android:hint="Enter the 1st number"

        tools:layout_editor_absoluteX="101dp"

        tools:layout_editor_absoluteY="223dp" />

        <EditText

        android:id="@+id/editTextText3"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:ems="10"

        android:inputType="text"

        android:text="Enter the second number"

        tools:layout_editor_absoluteX="101dp"

        tools:layout_editor_absoluteY="329dp" />

        <Button

        android:id="@+id/button2"

        android:layout_width="151dp"

        android:layout_height="66dp"

        android:text="ADD"

        android:onClick="add"

        app:layout_constraintBottom_toBottomOf="parent"
```

```
            app:layout_constraintEnd_toEndOf="parent"

            app:layout_constraintHorizontal_bias="0.446"

            app:layout_constraintStart_toStartOf="parent"

            app:layout_constraintTop_toTopOf="parent"

            app:layout_constraintVertical_bias="0.723" />

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

two.java

```java
package com.example.option2activity;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class two extends AppCompatActivity {

    Button b1;

    EditText e1,e2;

    @Override

    protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_two);

    e1=findViewById(R.id.editTextText2);

    e2=findViewById(R.id.editTextText3);

    }
```
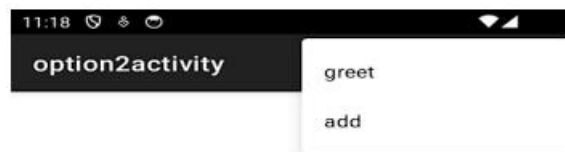
```
public void add(View v)

{

Double a,b,sum;

a=Double.parseDouble(e1.getText().toString());

b=Double.parseDouble(e2.getText().toString());

sum=a+b;

}

}
```
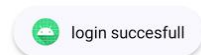
OUTPUT