## Practical 9

1. Write a program to create 2 toggle buttons and on the click of the button it should display which button is pressed.

#### Code:

```
<?xml version="1.0" encoding="utf-8"?>
<AbsoluteLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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:layout width="wrap content"
    android:layout_height="wrap_content"
    android:textOn="ON"
    android:textOff="OFF"
    android:textColor="@color/black"
    android:textSize="50dp"
    android:layout_x="50dp"
    android:layout_y="70dp"
    android:id="@+id/tbtn1"
    />
  <ToggleButton
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:textOn="ON"
    android:textOff="OFF"
    android:textColor="@color/black"
    android:textSize="50dp"
    android:layout_x="250dp"
    android:layout_y="70dp"
    android:id="@+id/tbtn2"
    />
  <Button
    android:id="@+id/nor_btn"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="SUBMIT"
    android:textSize="30dp"
    android:backgroundTint="@color/black"
    android:layout_y="250dp"
    android:layout_x="130dp"
</AbsoluteLayout>
```

# Java Code: package com.example.myapplication; import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.Toast; import android.widget.ToggleButton; public class MainActivity extends AppCompatActivity { ToggleButton b1,b2; Button btn; @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main); btn = (Button) findViewById(R.id.nor\_btn); b1 = (ToggleButton) findViewById(R.id.tbtn1); b2 = (ToggleButton) findViewById(R.id.tbtn2); btn.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View view) { Toast.makeText(getApplicationContext(), "State of Toggle Button 1: "+b1.getText()+"\n"+"State of Toggle Button 2: "+b2.getText(), Toast.LENGTH\_SHORT).show(); **})**; 7:53 🛮 🕒 👚 7:52 🛮 🗘 🖺 } **Experiment No 9 Experiment No 9** Output: **SUBMIT SUBMIT** State of Toggle Button 1: ON State of Toggle Button 1: ON State of Toggle Button 2: OFF State of Toggle Button 2: ON

Name : Aditya Choudhary Roll no : 19406 MAD Experiments

2. Write a program to create a toggle button to display the ON/OFF Bluetooth on the display screen.

### Code:

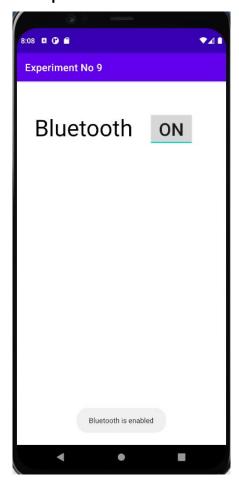
```
<?xml version="1.0" encoding="utf-8"?>
<AbsoluteLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  xmlns:app="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout width="match parent"
  android:layout_height="match_parent"
  tools:context=".MainActivity2">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Bluetooth"
    android:textSize="45dp"
    android:textColor="@color/black"
    android:layout_x="35dp"
    android:layout_y="60dp"
    />
  <ToggleButton
    android:id="@+id/tglbtn"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:textOn="ON"
    android:textOff="OFF"
    android:textSize="35dp"
    android:layout_y="60dp"
    android:layout_x="260dp"
    />
</AbsoluteLayout>
```

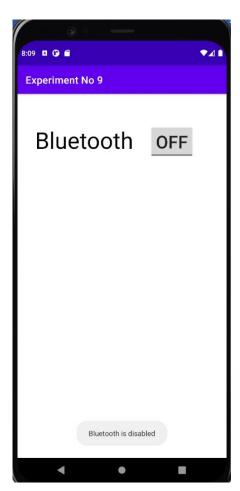
## Java Code:

```
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.CompoundButton;
import android.widget.Toast;
import android.widget.ToggleButton;
public class MainActivity2 extends AppCompatActivity {
  ToggleButton btn;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity main2);
    btn = (ToggleButton) findViewById(R.id.tglbtn);
    btn.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
       @Override
       public void on Checked Changed (Compound Button compound Button, boolean b) {
         if(btn.isChecked()){
           Toast.makeText(getApplicationContext(), "Bluetooth is enabled", Toast.LENGTH_SHORT).show();
           Toast.makeText(getApplicationContext(), "Bluetooth is disabled", Toast.LENGTH_SHORT).show();
         }}
     });}}
```

Name : Aditya Choudhary Roll no : 19406 MAD Experiments

## Output:





3. Write a program to create one rounded corner image button and one normal image button and on the click of the button it should display which button is pressed.

### Code:

```
<?xml version="1.0" encoding="utf-8"?>
<AbsoluteLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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=".MainActivity3">
  <ImageButton
    android:id="@+id/insta"
    android:layout_width="200dp"
    android:layout_height="200dp"
    android:layout_x="100dp"
    android:layout_y="70dp"
    android:src="@drawable/img"
    android:scaleType="fitCenter"
    android:background="@drawable/round"
    />
```

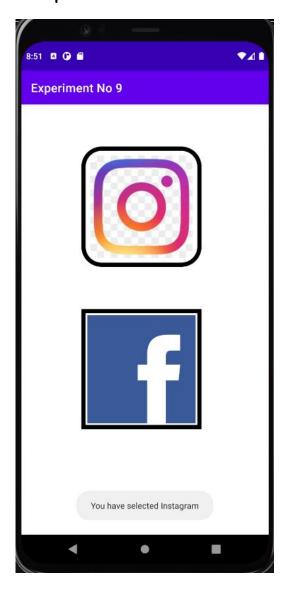
```
Name: Aditya Choudhary
                                           Roll no: 19406
                                                                           MAD Experiments
  <ImageButton
    android:id="@+id/face"
    android:layout_width="200dp"
    android:layout height="200dp"
    android:src="@drawable/img 1"
    android:layout_x="100dp"
    android:layout y="340dp"
    android:background="@drawable/normal"
    android:scaleType="fitCenter"
</AbsoluteLayout>
Java Code:
package com.example.myapplication;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;
import android.widget.Toast;
public class MainActivity3 extends AppCompatActivity {
  ImageButton b1,b2;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main3);
    b1 = (ImageButton) findViewById(R.id.insta);
    b2 = (ImageButton) findViewById(R.id.face);
    b1.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Toast.makeText(getApplicationContext(), "You have selected Instagram",
Toast.LENGTH_SHORT).show();
    });
    b2.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Toast.makeText(getApplicationContext(), "You have selected Facebook",
Toast.LENGTH SHORT).show();
    });
  }}
Round.xml Code:
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android">
  <solid android:color="#fffff" />
  <stroke android:width="7dp"/>
  <corners android:radius="30dp"/>
  <padding android:left="15dp" android:top="15dp" android:right="15dp" android:bottom="15dp" />
</shape>
```

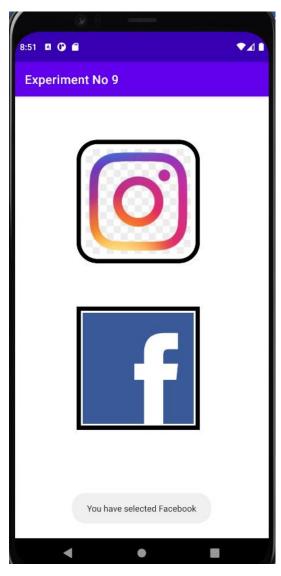
Name : Aditya Choudhary Roll no : 19406 MAD Experiments

## Normal.xml Code:

- <?xml version="1.0" encoding="utf-8"?>
- <shape xmlns:android="http://schemas.android.com/apk/res/android">
  - <solid android:color="#ffff" />
  - <stroke android:width="7dp"/>
- <padding android:left="10dp" android:top="10dp" android:right="10dp" android:bottom="10dp" />
- </shape>

## Output:





## 4. Write a program to make a simple calculator.

### Xml Code:

```
<?xml version="1.0" encoding="utf-8"?>
                                                                  android:layout width="wrap content"
                                                                  android:layout_height="wrap_content"
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/and
                                                                  android:text="Result: "
roid"
                                                                  android:textSize="35dp"
  xmlns:app="http://schemas.android.com/apk/res-auto"
                                                                  android:layout marginTop="20dp"
  xmlns:tools="http://schemas.android.com/tools"
                                                                  android:textColor="@color/black"
  android:layout_width="match_parent"
                                                                  android:textStyle="bold"
                                                                  android:layout_marginLeft="100dp"
  android:layout_height="match_parent"
  tools:context=".MainActivity"
                                                                  />
  android:orientation="vertical"
                                                                <TextView
                                                                  android:layout_width="wrap_content"
  <TextView
                                                                  android:layout_height="wrap_content"
     android:layout_width="wrap_content"
                                                                  android:text=""
     android:layout_height="wrap_content"
                                                                  android:textSize="35dp"
     android:layout_marginTop="30dp"
                                                                  android:layout_marginTop="20dp"
     android:text="Calculator app"
                                                                  android:textColor="@color/black"
     android:textSize="50dp"
                                                                  android:textStyle="bold"
     android:gravity="center"
                                                                  android:id="@+id/result"
     android:textColor="#000000"
                                                                  />
     android:fontFamily="cursive"
                                                                </LinearLayout>
                                                                <Button
     android:textStyle="bold"
     android:layout_gravity="center"
                                                                  android:layout_width="match_parent"
    />
                                                                  android:layout_height="60dp"
  <EditText
                                                                  android:textSize="20dp"
     android:layout_width="match_parent"
                                                                  android:text="Addition"
     android:layout_height="wrap_content"
                                                                  android:layout_marginTop="30dp"
     android:hint="Enter 1st number"
                                                                  android:backgroundTint="@color/black"
     android:layout_marginTop="40dp"
                                                                  android:layout_marginLeft="20dp"
     android:layout_marginLeft="20dp"
                                                                  android:layout_marginRight="20dp"
                                                                  android:id="@+id/add"
     android:layout marginRight="20dp"
     android:textColor="@color/black"
                                                                  />
     android:textSize="20dp"
                                                                <Button
    android:id="@+id/num1"
                                                                  android:layout_width="match_parent"
    />
                                                                  android:layout_height="60dp"
  <EditText
                                                                  android:textSize="20dp"
     android:layout_width="match_parent"
                                                                  android:text="Substraction"
     android:layout_height="wrap_content"
                                                                  android:layout_marginTop="5dp"
     android:hint="Enter 2nd number"
                                                                  android:backgroundTint="@color/black"
     android:layout_marginTop="15dp"
                                                                  android:layout_marginLeft="20dp"
     android:layout_marginLeft="20dp"
                                                                  android:layout_marginRight="20dp"
     android:layout marginRight="20dp"
                                                                  android:id="@+id/sub"
     android:textColor="@color/black"
                                                                  />
     android:textSize="20dp"
                                                                <Button
     android:id="@+id/num2"
                                                                  android:layout_width="match_parent"
                                                                  android:layout height="60dp"
  <LinearLayout
                                                                  android:textSize="20dp"
     android:layout_width="wrap_content"
                                                                  android:text="Multiplication"
     android:layout_height="wrap_content"
                                                                  android:layout_marginTop="5dp"
                                                                  android:backgroundTint="@color/black"
  <TextView
                                                                  android:layout_marginLeft="20dp"
```

#### Name: Aditya Choudhary

```
android:layout_marginRight="20dp"
android:id="@+id/mul"
/>
<Button
android:layout_width="match_parent"
android:layout_height="60dp"
android:textSize="20dp"
android:text="Division"
android:layout_marginTop="5dp"
android:backgroundTint="@color/black"
android:layout_marginLeft="20dp"
android:layout_marginRight="20dp"
android:id="@+id/div"
```

#### Roll no: 19406

</LinearLayout>

```
<Button
android:layout_width="match_parent"
android:layout_height="60dp"
android:textSize="20dp"
android:text="Modulus"
android:layout_marginTop="5dp"
android:backgroundTint="@color/black"
android:layout_marginLeft="20dp"
android:layout_marginRight="20dp"
android:id="@+id/mod"
/>
```

**MAD Experiments** 

### Java Code:

```
package com.example.mycalulator;
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,b5;
  EditText n1.n2:
  TextView finalresult:
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_main);
     n1 = findViewById(R.id.num1);
     n2 = findViewById(R.id.num2);
     finalresult = findViewById(R.id.result);
     b1 = findViewById(R.id.add);
     b2 = findViewById(R.id.sub);
     b3 = findViewById(R.id.mul);
     b4 = findViewById(R.id.div);
     b5 = findViewById(R.id.mod);
     b1.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 sum = a+b;
         finalresult.setText(Integer.toString(sum));
     });
     b2.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 sub = a-b;
         finalresult.setText(Integer.toString(sub));
       }
     b3.setOnClickListener(new View.OnClickListener() {
       @Override
```

public void onClick(View view) {

## Name: Aditya Choudhary Roll no: 19406 MAD Experiments

```
int a = Integer.parseInt(n1.getText().toString());
     int b = Integer.parseInt(n2.getText().toString());
    int mul = a*b;
     finalresult.setText(Integer.toString(mul));
});
b4.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 div = a/b;
     finalresult.setText(Integer.toString(div));
});
b5.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 mod = a\%b;
     finalresult.setText(Integer.toString(mod));
});
```

## Output:

