**Experiment 10**

**Student Name: Sahul Kumar Parida UID: 20BCS4919**

**Branch: CSE Section/Group: WM-904/B**

**Semester: 5th Date of Performance: 08/11/2022**

**Subject Name: Web and Mobile Security Lab**

**Subject Code: 20CSP-333**

**Aim:**

Create animations and graphical primitives in Android environment

**Tools to be used:**

Android Studio

**Software/Hardware Requirement:**

Java Runtime environment

PC

**Steps/Method/Code:**

**activity\_main.xml**

File: activity\_main.xml

<RelativeLayout xmlns:androclass="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:paddingBottom="@dimen/activity\_vertical\_margin" android:paddingLeft="@dimen/activity\_horizontal\_margin" android:paddingRight="@dimen/activity\_horizontal\_margin" android:paddingTop="@dimen/activity\_vertical\_margin" tools:context=".MainActivity" >

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:text="@string/hello\_world" />

</RelativeLayout>

**Activity class File: MainActivity.java**

package.com.example.simplegraphics;

import android.os.Bundle;

import android.app.Activity;

import android.view.Menu;

import android.content.Context;

import android.graphics.Canvas;

import android.graphics.Color;

import android.graphics.Paint;

import android.view.View;

public class MainActivity extends Activity {

DemoView demoview;

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

demoview = new DemoView(this);

setContentView(demoview);

}

private class DemoView extends View {

public DemoView(Context context) {

super(context);

}

@Override protected void onDraw(Canvas canvas) {

super.onDraw(canvas);

Paint paint = new Paint();

paint.setStyle(Paint.Style.FILL);

paint.setColor(Color.WHITE);

canvas.drawPaint(paint);

paint.setAntiAlias(false);

paint.setColor(Color.BLUE);

canvas.drawCircle(20, 20, 15, paint);

paint.setAntiAlias(true);

paint.setColor(Color.GREEN);

canvas.drawCircle(60, 20, 15, paint);

paint.setAntiAlias(false);

paint.setColor(Color.RED);

canvas.drawRect(100, 5, 200, 30, paint);

canvas.rotate(-45);

paint.setStyle(Paint.Style.FILL);

canvas.drawText("Graphics Rotation", 40, 180, paint);

canvas.restore();

}

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

}

**OUTPUT:**



**Learning Outcomes:**

Learned Basics of Android, Android Layouts and Widgets and Communication and Media.