



## Experiment 10

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**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:android="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.