**MainActivity**

package com.example.firebase  
  
import android.content.Context  
import android.graphics.Canvas  
import android.graphics.Color  
import android.graphics.Paint  
import android.os.Bundle  
import android.view.View  
import androidx.activity.enableEdgeToEdge  
import androidx.appcompat.app.AppCompatActivity  
import androidx.core.view.ViewCompat  
import androidx.core.view.WindowInsetsCompat  
  
class MainActivity : AppCompatActivity() {  
 private lateinit var demoview: DemoView  
  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 demoview = DemoView(this)  
 setContentView(demoview)  
 }  
  
 private inner class DemoView(context: Context) : View(context) {  
 override fun onDraw(canvas: Canvas) {  
 super.onDraw(canvas)  
 val paint = Paint()  
 paint.*style* = Paint.Style.*FILL* paint.*color* = Color.*WHITE* canvas.drawPaint(paint)  
  
 paint.*isAntiAlias* = false  
 paint.*color* = Color.*BLUE* canvas.drawCircle(20f, 20f, 15f, paint)  
  
 paint.*isAntiAlias* = true  
 paint.*color* = Color.*GREEN* canvas.drawCircle(60f, 20f, 15f, paint)  
  
 paint.*isAntiAlias* = false  
 paint.*color* = Color.*RED* canvas.drawRect(100f, 5f, 200f, 30f, paint)  
  
 canvas.rotate(45f)  
 paint.*style* = Paint.Style.*FILL* canvas.drawText("Graphics Rotation", 40f, 180f, paint)  
 *// canvas.restore()* }  
 }  
}

**ActivityMain.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/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
 <RelativeLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Hello World!"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 </RelativeLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>

**Animation.xml(inside drawable folder)**

*<?*xml version="1.0" encoding="utf-8"*?>*<animation-list xmlns:android="http://schemas.android.com/apk/res/android" android:oneshot="false">  
 <item android:drawable="@drawable/oip" android:duration="100"/>  
 <item android:drawable="@drawable/orange" android:duration="100"/>  
 <item android:drawable="@drawable/set" android:duration="100"/>  
</animation-list>

(Use any images)

**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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
<RelativeLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Hello World!"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</RelativeLayout>  
</androidx.constraintlayout.widget.ConstraintLayout>

package com.example.animatiom  
  
import android.graphics.drawable.AnimationDrawable  
import android.os.Bundle  
import android.widget.ImageView  
import androidx.activity.enableEdgeToEdge  
import androidx.appcompat.app.AppCompatActivity  
import androidx.core.view.ViewCompat  
import androidx.core.view.WindowInsetsCompat  
  
class MainActivity : AppCompatActivity() {  
  
 private lateinit var anm: ImageView  
  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*logo*)  
  
 anm = findViewById(R.id.*anm*)  
 anm.setBackgroundResource(R.drawable.*animation*)  
 }  
  
 override fun onWindowFocusChanged(hasFocus: Boolean) {  
 super.onWindowFocusChanged(hasFocus)  
  
 *// Ensure background is an AnimationDrawable* val frameAnimation = anm.*background* as? AnimationDrawable  
 frameAnimation?.*let* **{** if (hasFocus) {  
 **it**.start()  
 } else {  
 **it**.stop()  
 }  
 **}** }  
}