**1. Develop a program to rotate image clockwise,Zoom In ,Zoom Out,fade In,fade Out**

Activity\_main.xml

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

<**RelativeLayout 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:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Animation in Android"**

**android:id="@+id/textView"**

**android:textSize="35dp"**

**android:layout\_alignParentTop="true"**

**android:layout\_centerHorizontal="true"** />

<**ImageView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/imageView"**

**android:src="@mipmap/ic\_launcher\_round"**

**android:layout\_below="@+id/textView2"**

**android:layout\_alignRight="@+id/textView2"**

**android:layout\_alignEnd="@+id/textView2"**

**android:layout\_alignLeft="@+id/textView"**

**android:layout\_alignStart="@+id/textView"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="zoom"**

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

**android:layout\_below="@+id/imageView"**

**android:layout\_alignParentLeft="true"**

**android:layout\_alignParentStart="true"**

**android:layout\_marginTop="40dp"**

**android:onClick="clockwise"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="clockwise"**

**android:id="@+id/button2"**

**android:layout\_alignTop="@+id/button"**

**android:layout\_centerHorizontal="true"**

**android:onClick="zoom"**/>

<**Button android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="fade"**

**android:id="@+id/button3"**

**android:layout\_alignTop="@+id/button2"**

**android:layout\_alignParentRight="true"**

**android:layout\_alignParentEnd="true"**

**android:onClick="fade"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="blink"**

**android:onClick="blink"**

**android:id="@+id/button4"**

**android:layout\_below="@+id/button"**

**android:layout\_alignParentLeft="true"**

**android:layout\_alignParentStart="true"** />

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="move"**

**android:onClick="move"**

**android:id="@+id/button5"**

**android:layout\_below="@+id/button2"**

**android:layout\_alignRight="@+id/button2"**

**android:layout\_alignEnd="@+id/button2"**

**android:layout\_alignLeft="@+id/button2"**

**android:layout\_alignStart="@+id/button2"** />

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="slide"**

**android:onClick="slide"**

**android:id="@+id/button6"**

**android:layout\_below="@+id/button3"**

**android:layout\_toRightOf="@+id/textView"**

**android:layout\_toEndOf="@+id/textView"** />

</**RelativeLayout**>

**MainActivity.java**

**package** com.example.myapplicationanimation;

**import** androidx.appcompat.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.view.animation.Animation;

**import** android.view.animation.AnimationUtils;

**import** android.widget.ImageView;

**public class** MainActivity **extends** AppCompatActivity {

@Override

**protected void** onCreate(Bundle savedInstanceState) { **super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

}

**public void** clockwise(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

Animation animation = AnimationUtils.*loadAnimation*(getApplicationContext(),

R.anim.***myanimation***);

image.startAnimation(animation);

}

**public void** zoom(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

Animation animation1 = AnimationUtils.*loadAnimation*(getApplicationContext(),

R.anim.***clockwise***);

image.startAnimation(animation1);

}

**public void** fade(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

Animation animation1 =

AnimationUtils.*loadAnimation*(getApplicationContext(),

R.anim.***fade***);

image.startAnimation(animation1);

}

**public void** blink(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

Animation animation1 =

AnimationUtils.*loadAnimation*(getApplicationContext(),

R.anim.***blink***);

image.startAnimation(animation1);

}

**public void** move(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

**Animation animation1 =**

**AnimationUtils.*loadAnimation*(getApplicationContext(), R.anim.*move*);**

**image.startAnimation(animation1);**

}

**public void** slide(View view){

ImageView image = (ImageView)findViewById(R.id.***imageView***);

**Animation animation1 =**

**AnimationUtils.loadAnimation(getApplicationContext(), R.anim.slide);**

**image.startAnimation(animation1);**

**}**

}

**Animation.xml Files**

Create anim folder and create xml files as below

1. Animation.xml

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

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

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

**android:fromXScale="0.5"**

**android:toXScale="3.0"**

**android:fromYScale="0.5"**

**android:toYScale="3.0"**

**android:duration="5000"**

**android:pivotX="50%"**

**android:pivotY="50%"** >

</**scale**>

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

**android:startOffset="5000"**

**android:fromXScale="3.0"**

**android:toXScale="0.5"**

**android:fromYScale="3.0"**

**android:toYScale="0.5"**

**android:duration="5000"**

**android:pivotX="50%"**

**android:pivotY="50%"** >

</**scale**>

</**set**>

**2.clockwise.xml**

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

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

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

**android:fromDegrees="0"**

**android:toDegrees="360"**

**android:pivotX="50%"**

**android:pivotY="50%"**

**android:duration="5000"** >

</**rotate**>

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

**android:startOffset="5000"**

**android:fromDegrees="360"**

**android:toDegrees="0"**

**android:pivotX="50%"**

**android:pivotY="50%"**

**android:duration="5000"** >

</**rotate**>

</**set**>

3.fade.xml*<?***xml version="1.0" encoding="utf-8"***?>*

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

**android:interpolator="@android:anim/accelerate\_interpolator"** >

<**alpha**

**android:fromAlpha="0"**

**android:toAlpha="1"**

**android:duration="2000"** >

</**alpha**>

<**alpha**

**android:startOffset="2000"**

**android:fromAlpha="1"**

**android:toAlpha="0"**

**android:duration="2000"** >

</**alpha**>

</**set**>

**4.blink.xml**

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

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

<**alpha android:fromAlpha="0.0"**

**android:toAlpha="1.0"**

**android:interpolator="@android:anim/accelerate\_interpolator"**

**android:duration="600"**

**android:repeatMode="reverse"**

**android:repeatCount="infinite"**/>

</**set**>

**5.move.xml**

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

<**set**

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

**android:interpolator="@android:anim/linear\_interpolator"**

**android:fillAfter="true"**>

<**translate**

**android:fromXDelta="0%p"**

**android:toXDelta="75%p"**

**android:duration="800"** />

</**set**>

**6.slide.xml**

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

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

**android:fillAfter="true"** >

<**scale**

**android:duration="500"**

**android:fromXScale="1.0"**

**android:fromYScale="1.0" android:interpolator="@android:anim/linear\_interpolator"**

**android:toXScale="1.0"**

**android:toYScale="0.0"** />

</**set**>