**Practical Related Questions**

1. **Write the steps to perform Tween Animation.**
2. Step 1: Open or Start an Android Project.
3. Step 2: Create the Sky Shape Drawable.
4. Step 3: Create the Sun Shape Drawable.
5. Step 4: Create the Grass Shape Drawable.
6. Step 5: Include the Drawables in the Layout.
7. Step 6: Define the Sun Rise Animation.
8. Step 7: Apply the Animation.
9. **Explain the use of from XScale and from YScale method in detail.**

This method is used to define initial position, from where to start scale animation.

**Exercise**

**MainActivity.java**

package com.example.animationeg;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.icu.number.Scale;  
import android.os.Bundle;  
import android.view.View;  
import android.view.animation.AlphaAnimation;  
import android.view.animation.RotateAnimation;  
import android.view.animation.ScaleAnimation;  
import android.widget.Button;  
import android.widget.ImageView;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
  
 ImageView img;  
 ScaleAnimation scale;  
 RotateAnimation rotate;  
 AlphaAnimation alpha;  
 Button b1, b2, b3, b4, b5, b6;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 img = (ImageView) findViewById(R.id.*imageView*);  
  
 b1 = (Button) findViewById(R.id.*anticlockwise*);  
 b2 = (Button) findViewById(R.id.*rclockwise*);  
 b3 = (Button) findViewById(R.id.*fadein*);  
 b4 = (Button) findViewById(R.id.*fadeout*);  
 b5 = (Button) findViewById(R.id.*zoomin*);  
 b6 = (Button) findViewById(R.id.*zoomout*);  
  
 b1.setOnClickListener(this);  
 b2.setOnClickListener(this);  
 b3.setOnClickListener(this);  
 b4.setOnClickListener(this);  
 b5.setOnClickListener(this);  
 b6.setOnClickListener(this);  
  
  
 }  
  
 @Override  
 public void onClick(View v){  
 switch(v.getId()){  
 case R.id.*anticlockwise*:  
 rotate = new RotateAnimation(360, 0);  
 rotate.setDuration(1000);  
 img.startAnimation(rotate);  
 break;  
 case R.id.*rclockwise*:  
 rotate = new RotateAnimation(0, 360);  
 rotate.setDuration(1000);  
 img.startAnimation(rotate);  
 break;  
 case R.id.*fadein*:  
 alpha = new AlphaAnimation(0,1000);  
 alpha.setDuration(1000);  
 img.startAnimation(alpha);  
 break;  
 case R.id.*fadeout*:  
 alpha = new AlphaAnimation(1000,0);  
 alpha.setDuration(1000);  
 img.startAnimation(alpha);  
 break;  
 case R.id.*zoomin*:  
 scale = new ScaleAnimation(0, 2, 0, 2);  
 scale.setDuration(1000);  
 img.startAnimation(scale);  
 break;  
 case R.id.*zoomout*:  
 scale = new ScaleAnimation(2, 0, 2, 0);  
 scale.setDuration(1000);  
 img.startAnimation(scale);  
 break;  
 }  
 }  
}

**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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="117dp"  
 android:layout\_height="121dp"  
 android:layout\_marginTop="128dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@android:drawable/btn\_star\_big\_on" />  
  
 <Button  
 android:id="@+id/rclockwise"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="rotate clockwise"  
 app:layout\_constraintBottom\_toTopOf="@+id/fadein"  
 app:layout\_constraintStart\_toStartOf="parent" />  
  
 <Button  
 android:id="@+id/anticlockwise"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="anti clockwise"  
 app:layout\_constraintBottom\_toTopOf="@+id/fadeout"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
  
 <Button  
 android:id="@+id/fadein"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Fade In"  
 app:layout\_constraintBottom\_toTopOf="@+id/zoomin"  
 app:layout\_constraintStart\_toStartOf="parent" />  
  
 <Button  
 android:id="@+id/fadeout"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Fade Out"  
 app:layout\_constraintBottom\_toTopOf="@+id/zoomout"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
  
 <Button  
 android:id="@+id/zoomin"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Zoom IN"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent" />  
  
 <Button  
 android:id="@+id/zoomout"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Zoom Out"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>