**Ex-4 Create an animation using multithreading**

**MainActivity.java**

package com.example.ex4;  
  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
  
public class MainActivity extends AppCompatActivity {  
 ImageView i;  
 Button b,b1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 i=(ImageView) findViewById(R.id.*imageView*);  
 b=(Button) findViewById(R.id.*button*);  
 b1=(Button) findViewById(R.id.*button2*);  
 b.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 new Thread(new Runnable() {  
 @Override  
 public void run() {  
 i.post(new Runnable() {  
 @Override  
 public void run() {  
 i.setImageResource(R.drawable.*cybersecurity*);  
 }  
 });  
 }  
 }).start();  
 }  
 });  
 b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 new Thread(new Runnable() {  
 @Override  
 public void run() {  
 i.post(new Runnable() {  
 @Override  
 public void run() {  
 i.setImageResource(R.drawable.*artificialint*);  
 }  
 });  
 }  
 }).start();  
 }  
 });  
 }  
}

**activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>  
<android.support.constraint.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">  
  
 <LinearLayout  
 android:layout\_width="409dp"  
 android:layout\_height="729dp"  
 android:orientation="vertical"  
 tools:layout\_editor\_absoluteX="1dp"  
 tools:layout\_editor\_absoluteY="1dp">  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 tools:srcCompat="@tools:sample/avatars" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Cybersecurity" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Artifical Intelligence" />  
 </LinearLayout>  
</android.support.constraint.ConstraintLayout>

**Output:**

Button – CYBERSECURITY Button – ARTIFICIAL INTELLIGENCE

 