**//slip20**

**//q1.create Android Program to Change The image on the Screen**

**Xml file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout 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"  
 android:orientation="vertical"  
 android:gravity="center">  
 <Button  
 android:id="@+id/changeImageButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click here to channge image"  
 android:layout\_marginBottom="100dp"  
 android:gravity="center"/>  
 <ImageView  
 android:id="@+id/image\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:src="@drawable/image1"/>

**Java file**

package com.example.sliceapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
  
public class MainActivity extends AppCompatActivity {  
 private ImageView i1; *//create variable for ImageView  
 // private int[] //image={R.drawable.image,R.drawable.nature\_image,R.drawable.sun\_sine\_img};  
 // private int imageIndex=0; //declare here give private specifier  
 //here we create array of images that you want to display in our app. and strore this images in app resource i.e res->drawable* int[] image = {R.drawable.*image1*, R.drawable.*image2*, R.drawable.*image3*};  
 int imageIndex = 0; *// set counter variable equal to 0* @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 *// here initialize the ImageView variable by findViewById()* i1 = findViewById(R.id.*image\_view*);  
 *//here we create array of images that you want to display in our app. and strore this images in app resource i.e res->drawable* int[] image = {R.drawable.*image1*, R.drawable.*image2*, R.drawable.*image3*};  
  
  
  
 Button b1 = findViewById(R.id.*changeImageButton*); *//button will change image* b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
 changeImg(); *//here we call changeImg() merhod* }  
 });  
 }  
 private void changeImg(){ imageIndex = (imageIndex + 1) % image.length; i1.setImageResource(image[imageIndex]);  
 }}

**(OR) MAM**

**Xml file**

*<?*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">  
  
 <LinearLayout  
  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 android:paddingBottom="40px"  
 android:weightSum="2">  
  
 <RadioGroup  
 android:id="@+id/rg"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical">  
  
 <RadioButton  
 android:id="@+id/rb1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 1"/>  
  
  
 <RadioButton  
 android:id="@+id/rb2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 2"/>  
  
 <RadioButton  
 android:id="@+id/rb3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Image 3"/>  
  
  
  
  
 </RadioGroup>  
  
  
 </LinearLayout>  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:src="@drawable/image1"/>  
  
  
</RelativeLayout>

**Java file**

package com.example.imageapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.ImageView;  
import android.widget.RadioGroup;  
  
public class MainActivity extends AppCompatActivity implements RadioGroup.OnCheckedChangeListener {  
 RadioGroup group1;  
  
 ImageView img;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 group1 = (RadioGroup) findViewById(R.id.*rg*);  
 group1.setOnCheckedChangeListener((RadioGroup.OnCheckedChangeListener)this);  
 img = (ImageView) findViewById(R.id.*imageView*);  
  
 }  
  
 @Override  
 public void onCheckedChanged(RadioGroup radioGroup, int i) {  
 switch (i) {  
 case R.id.*rb1*:  
 img.setImageResource(R.drawable.*image1*);  
 break;  
  
 case R.id.*rb2*:  
 img.setImageResource(R.drawable.*image2*);  
 break;  
  
 case R.id.*rb3*:  
 img.setImageResource(R.drawable.*image3*);  
 break;  
  
 default:  
 break;  
  
 }  
  
  
 }  
}

**Q.2. Demostrate Array Adapter using List View display list of Country**

**XML file**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout  
 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"  
 android:orientation="vertical"  
 tools:context=".S20OrQ1MenuActivity">  
  
 <ListView  
 android:id="@+id/country\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="492dp" />  
  
</LinearLayout>

**//JAVA File**

package com.example.sliceapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
import java.util.ArrayList;  
*// array adpater with list view*public class S20OrQ1MenuActivity extends AppCompatActivity {  
 ListView countryListView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_s20\_or\_q1\_menu*);  
  
 *//Initialize the ListView* countryListView=findViewById(R.id.*country\_list*);  
 ArrayList<String>country=new ArrayList<>();  
 country.add("india");  
 country.add("china");  
 country.add("America");  
  
  
 *//Creat an array of countires* ArrayAdapter<String>arrayAdapter=new ArrayAdapter<>(this,android.R.layout.*simple\_list\_item\_1*,country);  
 *// array adapter h vo android ki class hoti h jo ki jo madat kari h java ke array adapte karne m ya niki agar android ko java ke array list view me dikhane h to usko array Adapter class ka estmal karna padega* countryListView.setAdapter(arrayAdapter);  
 }  
  
}