Slips 4

**Q.1)** Construct image switcher using setFactory().

Ans.

<RelativeLayout

xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<ImageSwitcher android:id="@+id/imageSwitcher" android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:layout\_centerInParent="true" android:layout\_margin="10dp" />

<Button android:id="@+id/buttonPrev" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Previous" android:layout\_alignParentStart="true" android:layout\_alignParentBottom="true" android:layout\_margin="16dp" android:onClick="showPreviousImage" />

<Button android:id="@+id/buttonNext" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Next" android:layout\_alignParentEnd="true" android:layout\_alignParentBottom="true" android:layout\_margin="16dp" android:onClick="showNextImage" /> </RelativeLayout>

**MainActivity.java- package** com.example.myapplication;

import android.os.Bundle; import android.view.View; import android.widget.ImageSwitcher; import android.widget.ImageView; import android.widget.Button; import android.widget.ViewSwitcher; import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

private ImageSwitcher imageSwitcher;

private int[] images = {R.drawable.ic\_launcher\_background, R.drawable.ic\_launcher\_foreground, R.drawable.image3}; private int currentIndex = 0;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main); imageSwitcher = findViewById(R.id.imageSwitcher); imageSwitcher.setFactory(new ViewSwitcher.ViewFactory() { @Override public View makeView() {

ImageView imageView = new

ImageView(getApplicationContext());

imageView.setScaleType(ImageView.ScaleType.CENTER\_INSIDE);

imageView.setLayoutParams(new ImageSwitcher.LayoutParams(

ImageSwitcher.LayoutParams.MATCH\_PARENT, ImageSwitcher.LayoutParams.MATCH\_PARENT));

return imageView;

}

});

showImage(currentIndex);

}

public void showPreviousImage(View view) {

if (currentIndex > 0) { currentIndex--;

} else {

currentIndex = images.length - 1;

}

showImage(currentIndex);

}

public void showNextImage(View view) { if (currentIndex < images.length - 1) {

currentIndex++;

} else {

currentIndex = 0;

}

showImage(currentIndex);

}

private void showImage(int index) { imageSwitcher.setImageResource(images[index]);

}

}

**Q.2)** Write a program to search a specific location on Google Map.

Ans.

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

<RelativeLayout

xmlns:android="http://schemas.android.com/apk/res/android" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<EditText android:id="@+id/editTextLocation" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_margin="16dp" android:hint="Enter location to search" />

<Button android:id="@+id/buttonSearch" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextLocation" android:layout\_centerHorizontal="true" android:layout\_marginTop="16dp" android:text="Search" android:onClick="searchLocation" />

</RelativeLayout>

**MainActivity.java- package** com.example.myapplication;

import android.content.Intent; import android.net.Uri; import android.os.Bundle; import android.view.View; import android.widget.EditText; import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity { private EditText editTextLocation;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

editTextLocation = findViewById(R.id.editTextLocation);

}

public void searchLocation(View view) {

String location = editTextLocation.getText().toString().trim(); if (!location.isEmpty()) {

// Encode the location query

String encodedLocation = Uri.encode(location);

// Create a Uri for the Google Maps search intent

Uri gmmIntentUri = Uri.parse("geo:0,0?q=" + encodedLocation);

// Create an intent to open Google Maps

Intent mapIntent = new Intent(Intent.ACTION\_VIEW, gmmIntentUri);

mapIntent.setPackage("com.google.android.apps.maps");

// Use the Google Maps app

if (mapIntent.resolveActivity(getPackageManager()) != null)

{

startActivity(mapIntent);

} else {

// Handle the case where Google Maps app is not installed

// Alternatively, you can open the location in a web browser

}

}

}

}