Slips 6

**Q.1)** Java Android Program to demonstrate login form with validation.

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/editTextEmail" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_margin="16dp" android:hint="Email" android:inputType="textEmailAddress" />

<EditText

android:id="@+id/editTextPassword" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextEmail" android:layout\_margin="16dp" android:hint="Password" android:inputType="textPassword" /> <Button android:id="@+id/buttonLogin" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextPassword" android:layout\_marginTop="16dp" android:layout\_centerHorizontal="true" android:text="Login" android:onClick="login" />

<TextView

android:id="@+id/textViewSignUp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/buttonLogin" android:layout\_centerHorizontal="true" android:layout\_marginTop="16dp" android:text="Not a member? Sign Up now." android:textColor="@android:color/darker\_gray" android:textSize="16sp" />

</RelativeLayout>

**MainActivity.java- package** com.example.myapplication; import android.os.Bundle; import android.view.View; import android.widget.EditText; import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity { private EditText editTextEmail, editTextPassword;

@Override

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

editTextEmail = findViewById(R.id.editTextEmail); editTextPassword = findViewById(R.id.editTextPassword);

}

public void login(View view) {

String email = editTextEmail.getText().toString().trim();

String password =

editTextPassword.getText().toString().trim();

if (isValidEmail(email) && isValidPassword(password)) { // Perform login operation

// For demonstration, show a toast message

Toast.makeText(this, "Login Successful", Toast.LENGTH\_SHORT).show();

} else {

// Show error message

Toast.makeText(this, "Invalid email or password", Toast.LENGTH\_SHORT).show();

}

}

private boolean isValidEmail(String email) {

// Simple email validation, you can use regex for more complex validation

return

android.util.Patterns.EMAIL\_ADDRESS.matcher(email).matches()

;

}

private boolean isValidPassword(String password) {

// Password validation, you can add your own criteria for password validation

return password.length() >= 6;

}

}

**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

}

}

}

}