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.AppCompa
tActivity;


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
            }
        }
    }
}
```