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

To write an Android application to search for a specific location on Google Maps, you can use the Google Maps SDK for Android provided by Google. Here's a basic example of how you can achieve this:

1. Set up a new Android project in Android Studio.
2. Add the Google Maps SDK to your project.
3. Create a layout file for your activity with a search bar and a map fragment.
4. Write Java code to handle user input, search for the location, and display it on the map.

Here's a simplified version of the code:

```java
import android.os.Bundle;

import android.widget.EditText;

import android.widget.Toast;


import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;


import com.google.android.gms.maps.CameraUpdateFactory;

import com.google.android.gms.maps.GoogleMap;

import com.google.android.gms.maps.OnMapReadyCallback;

import com.google.android.gms.maps.SupportMapFragment;

import com.google.android.gms.maps.model.LatLng;

import com.google.android.gms.maps.model.MarkerOptions;


public class MapsActivity extends AppCompatActivity implements
OnMapReadyCallback {


    private GoogleMap mMap;
```

```java
    private EditText searchEditText;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_maps);


        searchEditText = findViewById(R.id.searchEditText);


        SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager()
                .findFragmentById(R.id.map);
        mapFragment.getMapAsync(this);
    }


    @Override
    public void onMapReady(GoogleMap googleMap) {
        mMap = googleMap;


        // Set default location (e.g., city center)
        LatLng defaultLocation = new LatLng(0, 0);

mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(defaultLocation, 10));
```

```java
    // Handle search button click
    findViewById(R.id.searchButton).setOnClickListener(view -> {
        String locationName = searchEditText.getText().toString().trim();
        if (!locationName.isEmpty()) {
            searchLocation(locationName);
        } else {
            Toast.makeText(this, "Please enter a location to search",
Toast.LENGTH_SHORT).show();
        }
    });
}


    private void searchLocation(String locationName) {
        // Perform the search and update the map
        // Here you can use Geocoding API or any other service to get the LatLng of
the location
        // For simplicity, this example just adds a marker at a fixed location
        LatLng searchedLocation = new LatLng(37.7749, -122.4194); // San
Francisco, CA
        mMap.clear(); // Clear previous markers
        mMap.addMarker(new
MarkerOptions().position(searchedLocation).title(locationName));

mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(searchedLocation,
15));
    }
```

}