**Theory: Google Maps Geocoding API**

**What is the Google Maps Geocoding API?**

**The Google Maps Geocoding API allows you to convert addresses into geographic coordinates, which you can use to place markers on a map, or position the map. This can be useful for applications that need to search for an address or show the location on a map.**

**Geocoding Process:**

1. **Address to Coordinates: It converts a given address (e.g., "1600 Amphitheatre Parkway, Mountain View, CA") into latitude and longitude.**
2. **Coordinates to Address: It can also convert geographic coordinates (latitude, longitude) into a human-readable address (reverse geocoding).**