ABH Testing Task for position of Test Engineer

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ABH Testing Task:

ABH Testing Task Investigate Google Geocoding API service and create test plan https://developers.google.com/maps/documentation/geocoding/intro#Geocoding

1. Write test cases for this service

2. From all the test cases, identify what you think represents a Smoke Test

3. Identify at least one positive and one negative test for both forward and reverse geocoding

4. Create Github repository and push your assignment solution there

Bonus: With a tool of your own choosing, automate the Smoke Test from #2 (you can use tools like: Postman, JMeter etc.)

Note: Write test cases/test script for API (NOT for UI that is also available in documentation above)

1. Write test cases for this service

TEST CASE 1: For given valid address “Europe” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Europe&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Europe",
          "short_name": "Europe",
          "types": [
            "continent",
            "establishment",
            "natural_feature"
          ]
        }
      ],
      "formatted_address": "Europe",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 82.1673907,
            "lng": 74.3554999
          },
          "southwest": {
            "lat": 34.5428,
            "lng": -31.4647999
          }
        },
        "location": {
          "lat": 54.5259614,
          "lng": 15.2551187
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 65,
            "lng": 55
          },
          "southwest": {
            "lat": 34,
            "lng": -11
          }
        }
      },
      "place_id": "ChIJhdqtz4aI7UYRefD8s-aZ73I",
      "types": [
        "continent",
        "establishment",
        "natural_feature"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 2: For given valid address “Švedska” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Švedska&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Sweden",
          "short_name": "SE",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Sweden",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 69.0599709,
            "lng": 24.1773102
          },
          "southwest": {
            "lat": 55.0059799,
            "lng": 10.5798
          }
        },
        "location": {
          "lat": 60.12816100000001,
          "lng": 18.643501
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 69.05916479999999,
            "lng": 24.1616356
          },
          "southwest": {
            "lat": 55.33860300000001,
            "lng": 10.9639409
          }
        }
      },
      "place_id": "ChIJ8fA1bTmyXEYRYm-tjaLruCI",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 3 : For given valid address “Sarajevo” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Sarajevo&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Sarajevo, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.9664726,
            "lng": 18.5171986
          },
          "southwest": {
            "lat": 43.820974,
            "lng": 18.2487844
          }
        },
        "location": {
          "lat": 43.8562586,
          "lng": 18.4130763
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.9664726,
            "lng": 18.5171986
          },
          "southwest": {
            "lat": 43.820974,
            "lng": 18.2487844
          }
        }
      },
      "place_id": "ChIJ0Ztx7bHLWEcRPrOH3qbNLlY",
      "types": [
        "locality",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 4 : For given valid address “Marka Marulica” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Marka+Marulica&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Solin",
          "short_name": "Solin",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "21210",
          "short_name": "21210",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 21210, Solin, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.5401464,
            "lng": 16.5055472
          },
          "southwest": {
            "lat": 43.5326623,
            "lng": 16.4867553
          }
        },
        "location": {
          "lat": 43.5370518,
          "lng": 16.4964349
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.5401464,
            "lng": 16.5055472
          },
          "southwest": {
            "lat": 43.5326623,
            "lng": 16.4867553
          }
        }
      },
      "place_id": "ChIJg2OwFwdfNRMRARuyZnJH_GA",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Mravince",
          "short_name": "Mravince",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "21209",
          "short_name": "21209",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 21209, Mravince, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.53483420000001,
            "lng": 16.5237003
          },
          "southwest": {
            "lat": 43.5309844,
            "lng": 16.5174138
          }
        },
        "location": {
          "lat": 43.532914,
          "lng": 16.5206169
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.53483420000001,
            "lng": 16.5237003
          },
          "southwest": {
            "lat": 43.5309844,
            "lng": 16.5174138
          }
        }
      },
      "place_id": "ChIJa4BzsXdfNRMRkk_L3ahJzeY",
      "types": [
        "route"
      ]
```

```
    },
    {
      "address_components": [
        {
          "long_name": "Marka Marulića",
          "short_name": "Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Novo Sarajevo",
          "short_name": "Novo Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Marka Marulića, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.8569641,
            "lng": 18.3844614
          },
          "southwest": {
            "lat": 43.854947,
            "lng": 18.3777809
          }
        },
        "location": {
          "lat": 43.85567229999999,
          "lng": 18.3811998
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.85730453029149,
            "lng": 18.3844614
          },
          "southwest": {
            "lat": 43.85460656970849,
            "lng": 18.3777809
          }
        }
      },
      "place_id": "ChIJr7jffhXJWEcR_nGaAc-_0vc",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Zadar",
          "short_name": "Zadar",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Općina Zadar",
          "short_name": "Općina Zadar",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "23000",
          "short_name": "23000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 23000, Zadar, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 44.1109692,
            "lng": 15.2340304
          },
          "southwest": {
            "lat": 44.1078076,
            "lng": 15.2315726
          }
        },
        "location": {
          "lat": 44.1092766,
          "lng": 15.2329911
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 44.1109692,
            "lng": 15.23415048029151
          },
          "southwest": {
            "lat": 44.1078076,
            "lng": 15.2314525197085
          }
        }
      },
      "place_id": "ChIJR_Qe7Gb6YUcRjYsPiyXjk-Y",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Vinkovci",
          "short_name": "Vinkovci",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "32100",
          "short_name": "32100",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 32100, Vinkovci, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.29275819999999,
            "lng": 18.7736895
          },
          "southwest": {
            "lat": 45.2909751,
            "lng": 18.752277
          }
        },
        "location": {
          "lat": 45.2924926,
          "lng": 18.7627184
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 45.29321563029149,
            "lng": 18.7736895
          },
          "southwest": {
            "lat": 45.29051766970849,
            "lng": 18.752277
          }
        }
      },
      "place_id": "ChIJaVKmJC71XEcRzuun_9JBw0k",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Marka Marulića",
          "short_name": "Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Zapadnohercegovačka županija",
          "short_name": "Zapadnohercegovačka županija",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Marka Marulića, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.3944384,
            "lng": 17.6176503
          },
          "southwest": {
            "lat": 43.3837892,
            "lng": 17.5972084
          }
        },
        "location": {
          "lat": 43.3900642,
          "lng": 17.6063874
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.3944384,
            "lng": 17.6176503
          },
          "southwest": {
            "lat": 43.3837892,
            "lng": 17.5972084
          }
        }
      },
      "place_id": "ChIJ84Cv_MQ-SxMRYYgDPkIIDkg",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Ostrošinci",
          "short_name": "Ostrošinci",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Općina Podgorač",
          "short_name": "Općina Podgorač",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Osječko-baranjska županija",
          "short_name": "Osječko-baranjska županija",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "31433",
          "short_name": "31433",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 31433, Ostrošinci, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.4372321,
            "lng": 18.2053591
          },
          "southwest": {
            "lat": 45.42651499999999,
            "lng": 18.1978085
          }
        },
        "location": {
          "lat": 45.4327331,
          "lng": 18.2001752
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 45.4372321,
            "lng": 18.2053591
          },
          "southwest": {
            "lat": 45.42651499999999,
            "lng": 18.1978085
          }
        }
      },
      "place_id": "ChIJVZnTOQAGXUcRS3FnHQnURDI",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Nuštar",
          "short_name": "Nuštar",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Općina Nuštar",
          "short_name": "Općina Nuštar",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Vukovarsko-srijemska županija",
          "short_name": "Vukovarsko-srijemska županija",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "32221",
          "short_name": "32221",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, 32221, Nuštar, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.3315424,
            "lng": 18.8543794
          },
          "southwest": {
            "lat": 45.3304888,
            "lng": 18.8428536
          }
        },
        "location": {
          "lat": 45.331293,
          "lng": 18.8484633
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 45.3323645802915,
            "lng": 18.8543794
          },
          "southwest": {
            "lat": 45.3296666197085,
            "lng": 18.8428536
          }
        }
      },
      "place_id": "ChIJcwvppYaMXEcR6SDx3mfY1r4",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ulica Marka Marulića",
          "short_name": "Ul. Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Pula",
          "short_name": "Pula",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Ul. Marka Marulića, Pula, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 44.8653886,
            "lng": 13.8496798
          },
          "southwest": {
            "lat": 44.8589394,
            "lng": 13.8468105
          }
        },
        "location": {
          "lat": 44.8620993,
          "lng": 13.8482507
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 44.8653886,
            "lng": 13.8496798
          },
          "southwest": {
            "lat": 44.8589394,
            "lng": 13.8468105
          }
        }
      },
      "place_id": "ChIJvV-KUyLTfEcR6vBvOdQ43_M",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Trg Marka Marulića",
          "short_name": "Trg Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Zagreb",
          "short_name": "Zagreb",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "10000",
          "short_name": "10000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Trg Marka Marulića, 10000, Zagreb, Croatia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.807379,
            "lng": 15.9711436
          },
          "southwest": {
            "lat": 45.8053535,
            "lng": 15.9691666
          }
        },
        "location": {
          "lat": 45.806414,
          "lng": 15.970995
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 45.8077152302915,
            "lng": 15.9715040802915
          },
          "southwest": {
            "lat": 45.8050172697085,
            "lng": 15.9688061197085
          }
        }
      },
      "place_id": "ChIJG-b7k_rWZUcRF655cnyY13o",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 5: For given valid address “marka marulica, sarajevo” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=marka+marulica+sarajevo&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Marka Marulića",
          "short_name": "Marka Marulića",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Novo Sarajevo",
          "short_name": "Novo Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Marka Marulića, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.8569641,
            "lng": 18.3844614
          },
          "southwest": {
            "lat": 43.854947,
            "lng": 18.3777809
          }
        },
        "location": {
          "lat": 43.85567229999999,
          "lng": 18.3811998
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.85730453029149,
            "lng": 18.3844614
          },
          "southwest": {
            "lat": 43.85460656970849,
            "lng": 18.3777809
          }
        }
      },
      "place_id": "ChIJr7jffhXJWEcR_nGaAc-_0vc",
      "types": [
        "route"
      ]
    }
```

```
  ],
  "status": "OK"
}
```

TEST CASE 6: For given valid address “Marka Marulića 19, Sarajevo” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/xml?address=Marka+Marulića+19+Sarajevo&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

…
```
"status": "OK"
```
…

```
<?xml version="1.0" encoding="UTF-8"?>
<GeocodeResponse>
    <status>OK</status>
    <result>
        <type>premise</type>
        <formatted_address>Marka Marulića 19, Sarajevo 71000, Bosnia and
Herzegovina</formatted_address>
        <address_component>
            <long_name>19</long_name>
            <short_name>19</short_name>
            <type>street_number</type>
        </address_component>
        <address_component>
            <long_name>Marka Marulića</long_name>
            <short_name>Marka Marulića</short_name>
            <type>route</type>
        </address_component>
        <address_component>
            <long_name>Novo Sarajevo</long_name>
            <short_name>Novo Sarajevo</short_name>
            <type>political</type>
            <type>sublocality</type>
            <type>sublocality_level_1</type>
        </address_component>
        <address_component>
            <long_name>Sarajevo</long_name>
            <short_name>Sarajevo</short_name>
            <type>locality</type>
            <type>political</type>
        </address_component>
        <address_component>
            <long_name>Kanton Sarajevo</long_name>
            <short_name>Kanton Sarajevo</short_name>
            <type>administrative_area_level_2</type>
            <type>political</type>
        </address_component>
        <address_component>
            <long_name>Federacija Bosne i Hercegovine</long_name>
            <short_name>Federacija Bosne i Hercegovine</short_name>
            <type>administrative_area_level_1</type>
            <type>political</type>
        </address_component>
        <address_component>
            <long_name>Bosnia and Herzegovina</long_name>
            <short_name>BA</short_name>
            <type>country</type>
            <type>political</type>
        </address_component>
        <address_component>
            <long_name>71000</long_name>
            <short_name>71000</short_name>
            <type>postal_code</type>
        </address_component>
        <geometry>
            <location>
                <lat>43.8554528</lat>
                <lng>18.3810165</lng>
            </location>
            <location_type>ROOFTOP</location_type>
            <viewport>
                <southwest>
                    <lat>43.8541038</lat>
                    <lng>18.3796676</lng>
                </southwest>
                <northeast>
                    <lat>43.8568018</lat>
                    <lng>18.3823655</lng>
                </northeast>
            </viewport>
            <bounds>
                <southwest>
                    <lat>43.8553513</lat>
                    <lng>18.3808761</lng>
                </southwest>
                <northeast>
                    <lat>43.8555543</lat>
                    <lng>18.3811570</lng>
                </northeast>
            </bounds>
        </geometry>
        <place_id>ChIJkbVfeBXJWEcRSDvPWhtTkeE</place_id>
    </result>
</GeocodeResponse>
```

TEST CASE 7: For given valid address “Milana Preloga 12A” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?address=Milana+Preloga+12A&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "12A",
          "short_name": "12A",
          "types": [
            "street_number"
          ]
        },
        {
          "long_name": "Milana Preloga",
          "short_name": "Milana Preloga",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Milana Preloga 12A, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "location": {
          "lat": 43.8469294,
          "lng": 18.3742449
        },
        "location_type": "ROOFTOP",
        "viewport": {
          "northeast": {
            "lat": 43.8482783802915,
            "lng": 18.3755938802915
          },
          "southwest": {
            "lat": 43.8455804197085,
            "lng": 18.3728959197085
          }
        }
      },
      "place_id": "ChIJCWO2aA3JWEcRGQFpipDqbWY",
      "types": [
        "street_address"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 8: For given invalid address “skljmnnnd345čklkčlkčk” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/xml?address=skljmnnnd345čklkčlkčk&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"
…
```

```
<?xml version="1.0" encoding="UTF-8"?>
<GeocodeResponse>
    <status>ZERO_RESULTS</status>
</GeocodeResponse>
```

TEST CASE 9: For given invalid address “111111111111111222222222255555558888411111111666666666” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/xml?address=111111111111111222222222255555558888411111111666666666&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"

…
```

```
<?xml version="1.0" encoding="UTF-8"?>
<GeocodeResponse>
    <status>ZERO_RESULTS</status>
</GeocodeResponse>
```

TEST CASE 10: For given no address return status “INVALID_REQUEST”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…

"status": "INVALID_REQUEST"
…
```

```
{
  "error_message": "Invalid request. Missing the 'address', 'bounds', 'components', 'latlng' or
'place_id' parameter.",
  "results": [],
  "status": "INVALID_REQUEST"
}
```

TEST CASE 12: For given valid address ”Novo Sarajevo” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?address=Novo+Sarajevo&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Novo Sarajevo",
          "short_name": "Novo Sarajevo",
          "types": [
            "administrative_area_level_3",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Novo Sarajevo, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.8777383,
            "lng": 18.4113478
          },
          "southwest": {
            "lat": 43.8362719,
            "lng": 18.3649777
          }
        },
        "location": {
          "lat": 43.8627466,
          "lng": 18.3960211
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.8777383,
            "lng": 18.4113478
          },
          "southwest": {
            "lat": 43.8362719,
            "lng": 18.3649777
          }
        }
      },
      "place_id": "ChIJR8dblhbJWEcRJQoAcDOeEtY",
      "types": [
        "administrative_area_level_3",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 12: For given valid address component”12365” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=12365&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "12365",
          "short_name": "12365",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Vehmaa",
          "short_name": "Vehmaa",
          "types": [
            "administrative_area_level_3",
            "political"
          ]
        },
        {
          "long_name": "Finland",
          "short_name": "FI",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "12365, Vehmaa, Finland",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 60.68625239999999,
            "lng": 21.705158
          },
          "southwest": {
            "lat": 60.68204679999999,
            "lng": 21.6297746
          }
        },
        "location": {
          "lat": 60.6848104,
          "lng": 21.667409
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 60.68625239999999,
            "lng": 21.705158
          },
          "southwest": {
            "lat": 60.68204679999999,
            "lng": 21.6297746
          }
        }
      },
      "place_id": "ChIJQ0ZxKFGVi0YRBenCMzK8O6k",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 13: For given valid address component ”1” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=1&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "U.S. 1",
          "short_name": "US-1",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "US-1, United States",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 47.3564963,
            "lng": -67.0740864
          },
          "southwest": {
            "lat": 24.5503892,
            "lng": -93.08289859999999
          }
        },
        "location": {
          "lat": 35.5332005,
          "lng": -79.179632
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 47.3564963,
            "lng": -67.0740864
          },
          "southwest": {
            "lat": 24.5503892,
            "lng": -93.08289859999999
          }
        }
      },
      "place_id": "ChIJRV8ayXJoo4kR9y4B322HuyY",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "California 1",
          "short_name": "CA-1",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "California",
          "short_name": "CA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "CA-1, California, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 39.8682624,
            "lng": -117.6630598
          },
          "southwest": {
            "lat": 33.46274289999999,
            "lng": -123.832887
          }
        },
        "location": {
          "lat": 36.7544778,
          "lng": -121.765259
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 39.8682624,
            "lng": -117.6630598
          },
          "southwest": {
            "lat": 33.46274289999999,
            "lng": -123.832887
          }
        }
      },
      "place_id": "ChIJJ5-mLBm3k4ARoG5CSirSx80",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. 1 Truck",
          "short_name": "US-1 Truck",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "New Jersey",
          "short_name": "NJ",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "US-1 Truck, New Jersey, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 40.74303829999999,
            "lng": -74.06217049999999
          },
          "southwest": {
            "lat": 40.7046902,
            "lng": -74.18398929999999
          }
        },
        "location": {
          "lat": 40.7325986,
          "lng": -74.1189323
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 40.74303829999999,
            "lng": -74.06217049999999
          },
          "southwest": {
            "lat": 40.7046902,
            "lng": -74.18398929999999
          }
        }
      },
      "place_id": "ChIJW6uBflpRwokRIxbOuYfAuPE",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Highway A1A",
          "short_name": "Florida A1A",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Florida",
          "short_name": "FL",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Florida A1A, Florida, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 30.6707299,
            "lng": -80.0340683
          },
          "southwest": {
            "lat": 24.5504324,
            "lng": -81.8297379
          }
        },
        "location": {
          "lat": 27.813052,
          "lng": -80.4252511
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 30.6707299,
            "lng": -80.0340683
          },
          "southwest": {
            "lat": 24.5504324,
            "lng": -81.8297379
          }
        }
      },
      "place_id": "ChIJG0HpVNss3IgR254FftzEPmU",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 14: For given valid address component ”2” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=2&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "California 2",
          "short_name": "CA-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "California",
          "short_name": "CA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "CA-2, California, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 34.3908298,
            "lng": -117.5761692
          },
          "southwest": {
            "lat": 34.0386245,
            "lng": -118.4677199
          }
        },
        "location": {
          "lat": 34.2723275,
          "lng": -118.0255213
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 34.3908298,
            "lng": -117.5761692
          },
          "southwest": {
            "lat": 34.0386245,
            "lng": -118.4677199
          }
        }
      },
      "place_id": "ChIJ64rwrTTcwoARZ8nRT6OdkQI",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. Highway 2",
          "short_name": "US-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "US-2, United States",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 48.7324531,
            "lng": -67.7821872
          },
          "southwest": {
            "lat": 44.2371747,
            "lng": -122.1909768
          }
        },
        "location": {
          "lat": 47.3957098,
          "lng": -94.7798301
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 48.7324531,
            "lng": -67.7821872
          },
          "southwest": {
            "lat": 44.2371747,
            "lng": -122.1909768
          }
        }
      },
      "place_id": "ChIJQ9EOvYyatVIRwFLC5C31nqI",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Ohio 2",
          "short_name": "OH-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Ohio",
          "short_name": "OH",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "OH-2, Ohio, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 41.7580199,
            "lng": -81.19290239999999
          },
          "southwest": {
            "lat": 41.270478,
            "lng": -84.80356639999999
          }
        },
        "location": {
          "lat": 41.5158205,
          "lng": -82.9963774
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 41.7580199,
            "lng": -81.19290239999999
          },
          "southwest": {
            "lat": 41.270478,
            "lng": -84.80356639999999
          }
        }
      },
      "place_id": "ChIJXepunIaxO4gR8YJU5BC3Jbk",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Massachusetts 2",
          "short_name": "MA-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Massachusetts",
          "short_name": "MA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "MA-2, Massachusetts, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 42.7241216,
            "lng": -71.0714914
          },
          "southwest": {
            "lat": 42.3465802,
            "lng": -73.27316159999999
          }
        },
        "location": {
          "lat": 42.5726057,
          "lng": -72.1557248
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 42.7241216,
            "lng": -71.0714914
          },
          "southwest": {
            "lat": 42.3465802,
            "lng": -73.27316159999999
          }
        }
      },
      "place_id": "ChIJX0JtsIlP4YkRTjoVvRjBYAc",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Colorado 2",
          "short_name": "CO-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Colorado",
          "short_name": "CO",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "CO-2, Colorado, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 39.9867988,
            "lng": -104.8178415
          },
          "southwest": {
            "lat": 39.6529354,
            "lng": -104.9471405
          }
        },
        "location": {
          "lat": 39.8356456,
          "lng": -104.9058064
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 39.9867988,
            "lng": -104.8178415
          },
          "southwest": {
            "lat": 39.6529354,
            "lng": -104.9471405
          }
        }
      },
      "place_id": "ChIJGUY_zpF6bIcRoofwSCRQ3Mc",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. 2 Business",
          "short_name": "US-2 BUS",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Williston",
          "short_name": "Williston",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Williams County",
          "short_name": "Williams County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "North Dakota",
          "short_name": "ND",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "58801",
          "short_name": "58801",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "US-2 BUS, Williston, ND 58801, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 48.1688148,
            "lng": -103.6216148
          },
          "southwest": {
            "lat": 48.1451886,
            "lng": -103.6602756
          }
        },
        "location": {
          "lat": 48.1572798,
          "lng": -103.6257592
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 48.1688148,
            "lng": -103.6216148
          },
          "southwest": {
            "lat": 48.1451886,
            "lng": -103.6602756
          }
        }
      },
      "place_id": "ChIJTw_HXoVcIVMRDJErj8GTR8E",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. 2A",
          "short_name": "US-2A",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Aroostook County",
          "short_name": "Aroostook County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Maine",
          "short_name": "ME",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "US-2A, Maine, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 46.123964,
            "lng": -67.8412213
          },
          "southwest": {
            "lat": 45.63230739999999,
            "lng": -68.25993099999999
          }
        },
        "location": {
          "lat": 45.8806359,
          "lng": -68.0056709
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 46.123964,
            "lng": -67.8412213
          },
          "southwest": {
            "lat": 45.63230739999999,
            "lng": -68.25993099999999
          }
        }
      },
      "place_id": "ChIJT-rS_RvCpEwRPx0rvhxW-ec",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. 2 Alternate",
          "short_name": "US-2 ALT",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Penobscot County",
          "short_name": "Penobscot County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Maine",
          "short_name": "ME",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "US-2 ALT, Maine, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 44.9348125,
            "lng": -68.6457506
          },
          "southwest": {
            "lat": 44.8877719,
            "lng": -68.6833992
          }
        },
        "location": {
          "lat": 44.91123959999999,
          "lng": -68.6765623
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 44.9348125,
            "lng": -68.6457506
          },
          "southwest": {
            "lat": 44.8877719,
            "lng": -68.6833992
          }
        }
      },
      "place_id": "ChIJLRdFMH1opUwRS3GIpdJXRM0",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "U.S. 2 Business",
          "short_name": "US-2 BUS",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Minot",
          "short_name": "Minot",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Ward County",
          "short_name": "Ward County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "North Dakota",
          "short_name": "ND",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "58701",
          "short_name": "58701",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "US-2 BUS, Minot, ND 58701, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 48.2326564,
            "lng": -101.2181201
          },
          "southwest": {
            "lat": 48.2188149,
            "lng": -101.3356799
          }
        },
        "location": {
          "lat": 48.2324754,
          "lng": -101.2783076
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 48.2326564,
            "lng": -101.2181201
          },
          "southwest": {
            "lat": 48.2188149,
            "lng": -101.3356799
          }
        }
      },
      "place_id": "ChIJ06dA2Qwq31IRp_BzjYuqHbI",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Maryland 2",
          "short_name": "MD-2",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Maryland",
          "short_name": "MD",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "MD-2, Maryland, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 39.3112705,
            "lng": -76.4360705
          },
          "southwest": {
            "lat": 38.3317612,
            "lng": -76.6261004
          }
        },
        "location": {
          "lat": 38.8050803,
          "lng": -76.59907369999999
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 39.3112705,
            "lng": -76.4360705
          },
          "southwest": {
            "lat": 38.3317612,
            "lng": -76.6261004
          }
        }
      },
      "place_id": "ChIJFedzxC_xt4kRc8RfOFUU3vQ",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 15: For given valid address component ”132” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?address=132&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "California 132",
          "short_name": "CA-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "California",
          "short_name": "CA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "CA-132, California, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 37.71520599999999,
            "lng": -120.1969373
          },
          "southwest": {
            "lat": 37.6328239,
            "lng": -121.4140475
          }
        },
        "location": {
          "lat": 37.6386474,
          "lng": -120.8064341
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 37.71520599999999,
            "lng": -120.1969373
          },
          "southwest": {
            "lat": 37.6328239,
            "lng": -121.4140475
          }
        }
      },
      "place_id": "ChIJ4RaLmtb9kIARgWH1P2fL0oU",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Kentucky 132",
          "short_name": "KY-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Kentucky",
          "short_name": "KY",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "KY-132, Kentucky, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 37.6068826,
            "lng": -87.5326912
          },
          "southwest": {
            "lat": 37.3714078,
            "lng": -87.90498330000001
          }
        },
        "location": {
          "lat": 37.52227910000001,
          "lng": -87.7154745
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 37.6068826,
            "lng": -87.5326912
          },
          "southwest": {
            "lat": 37.3714078,
            "lng": -87.90498330000001
          }
        }
      },
      "place_id": "ChIJrVpYYfUQcIgR9fqyBWn62xk",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "New York 132",
          "short_name": "NY-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Yorktown Heights",
          "short_name": "Yorktown Heights",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Westchester County",
          "short_name": "Westchester County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "New York",
          "short_name": "NY",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "10598",
          "short_name": "10598",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "NY-132, Yorktown Heights, NY 10598, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 41.3316969,
            "lng": -73.8082129
          },
          "southwest": {
            "lat": 41.2941747,
            "lng": -73.8234116
          }
        },
        "location": {
          "lat": 41.3133883,
          "lng": -73.81380580000001
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 41.3316969,
            "lng": -73.8082129
          },
          "southwest": {
            "lat": 41.2941747,
            "lng": -73.8234116
          }
        }
      },
      "place_id": "ChIJmUkoTnK2wokR7PnFqpzM9po",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Virginia 132",
          "short_name": "VA-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Williamsburg",
          "short_name": "Williamsburg",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Virginia",
          "short_name": "VA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "VA-132, Williamsburg, VA, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 37.2961099,
            "lng": -76.6861864
          },
          "southwest": {
            "lat": 37.2481772,
            "lng": -76.7104313
          }
        },
        "location": {
          "lat": 37.271745,
          "lng": -76.7058552
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 37.2961099,
            "lng": -76.6861864
          },
          "southwest": {
            "lat": 37.2481772,
            "lng": -76.7104313
          }
        }
      },
      "place_id": "ChIJvb6IBQaJsIkRduCWA8cZvfQ",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "New Mexico 132",
          "short_name": "NM-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Hobbs",
          "short_name": "Hobbs",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "New Mexico",
          "short_name": "NM",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "NM-132, Hobbs, NM, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 32.9665117,
            "lng": -103.0645476
          },
          "southwest": {
            "lat": 32.725611,
            "lng": -103.1279846
          }
        },
        "location": {
          "lat": 32.8491984,
          "lng": -103.1278188
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 32.9665117,
            "lng": -103.0645476
          },
          "southwest": {
            "lat": 32.725611,
            "lng": -103.1279846
          }
        }
      },
      "place_id": "ChIJBdqLH1vp_IYRE_MoiBbVd9M",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Alabama 132",
          "short_name": "AL-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Alabama",
          "short_name": "AL",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "AL-132, Alabama, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 34.0577953,
            "lng": -86.22095
          },
          "southwest": {
            "lat": 33.9507311,
            "lng": -86.4693539
          }
        },
        "location": {
          "lat": 34.0112982,
          "lng": -86.35352209999999
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 34.0577953,
            "lng": -86.22095
          },
          "southwest": {
            "lat": 33.9507311,
            "lng": -86.4693539
          }
        }
      },
      "place_id": "ChIJwbyl1a6OiYgRiPXJ0VEOBbM",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Wyoming 132",
          "short_name": "WY-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Fremont County",
          "short_name": "Fremont County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Wyoming",
          "short_name": "WY",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "WY-132, Wyoming, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.1557385,
            "lng": -108.6950973
          },
          "southwest": {
            "lat": 42.9414296,
            "lng": -108.7958603
          }
        },
        "location": {
          "lat": 43.0485718,
          "lng": -108.7750995
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.1557385,
            "lng": -108.6950973
          },
          "southwest": {
            "lat": 42.9414296,
            "lng": -108.7958603
          }
        }
      },
      "place_id": "ChIJk-7W_JL2WIcRCfexiE2dCJc",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Texas 132",
          "short_name": "TX-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Texas",
          "short_name": "TX",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "TX-132, Texas, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 29.2430373,
            "lng": -98.77097219999999
          },
          "southwest": {
            "lat": 29.1110377,
            "lng": -98.92864
          }
        },
        "location": {
          "lat": 29.1880429,
          "lng": -98.8641794
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 29.2430373,
            "lng": -98.77097219999999
          },
          "southwest": {
            "lat": 29.1110377,
            "lng": -98.92864
          }
        }
      },
      "place_id": "ChIJI-bmh5s1XIYRFcBIKEsfNZo",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Georgia 132",
          "short_name": "GA-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Telfair County",
          "short_name": "Telfair County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Georgia",
          "short_name": "GA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "GA-132, Georgia, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 32.0446629,
            "lng": -82.9094667
          },
          "southwest": {
            "lat": 31.8801369,
            "lng": -83.1377004
          }
        },
        "location": {
          "lat": 31.9654752,
          "lng": -83.026028
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 32.0446629,
            "lng": -82.9094667
          },
          "southwest": {
            "lat": 31.8801369,
            "lng": -83.1377004
          }
        }
      },
      "place_id": "ChIJZfVdusex8YgRcK38HgiAjx4",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Massachusetts 132",
          "short_name": "MA-132",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Barnstable",
          "short_name": "Barnstable",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Barnstable County",
          "short_name": "Barnstable County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Massachusetts",
          "short_name": "MA",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "02630",
          "short_name": "02630",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "MA-132, Barnstable, MA 02630, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 41.6960692,
            "lng": -70.28768479999999
          },
          "southwest": {
            "lat": 41.6652609,
            "lng": -70.3443618
          }
        },
        "location": {
          "lat": 41.6784753,
          "lng": -70.31757209999999
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 41.6960692,
            "lng": -70.28768479999999
          },
          "southwest": {
            "lat": 41.6652609,
            "lng": -70.3443618
          }
        }
      },
      "place_id": "ChIJ57D55kgx-4kR8uYylxVu69c",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 16: For given valid address component ”71000” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=71000&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Wright City",
          "short_name": "Wright City",
          "types": [
            "locality",
          "political"
        ]
      },
      {
        "long_name": "McCurtain County",
        "short_name": "McCurtain County",
        "types": [
          "administrative_area_level_2",
          "political"
        ]
      },
      {
        "long_name": "Oklahoma",
        "short_name": "OK",
        "types": [
          "administrative_area_level_1",
          "political"
        ]
      },
      {
        "long_name": "United States",
        "short_name": "US",
        "types": [
          "country",
          "political"
        ]
      },
      {
        "long_name": "74766",
        "short_name": "74766",
        "types": [
          "postal_code"
        ]
      }
    ],
    "formatted_address": "71000, Wright City, OK 74766, USA",
    "geometry": {
      "bounds": {
        "northeast": {
          "lat": 34.1491569,
          "lng": -94.888233
        },
        "southwest": {
          "lat": 34.1251507,
          "lng": -94.9302902
        }
      },
      "location": {
        "lat": 34.137496,
        "lng": -94.900857
      },
      "location_type": "GEOMETRIC_CENTER",
      "viewport": {
        "northeast": {
          "lat": 34.1491569,
          "lng": -94.888233
        },
        "southwest": {
          "lat": 34.1251507,
          "lng": -94.9302902
        }
      }
    },
    "place_id": "ChIJQb19iqNcNYYRpm0VYJ4FVJ0",
      "types": [
        "route"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Idabel",
          "short_name": "Idabel",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "McCurtain County",
          "short_name": "McCurtain County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Oklahoma",
          "short_name": "OK",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "74745",
          "short_name": "74745",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "71000, Idabel, OK 74745, USA",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 34.1296804,
            "lng": -94.9667432
          },
          "southwest": {
            "lat": 34.129483,
            "lng": -94.97701889999999
          }
        },
        "location": {
          "lat": 34.129594,
          "lng": -94.972128
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 34.1309306802915,
            "lng": -94.9667432
          },
          "southwest": {
            "lat": 34.1282327197085,
            "lng": -94.97701889999999
          }
        }
      },
      "place_id": "ChIJm2WNoxxcNYYRVKVK-d9842Y",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 17: For given valid address component “71.000 ” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=71.000&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "71",
          "short_name": "71",
          "types": [
            "subpremise"
          ]
        },
        {
          "long_name": "909",
          "short_name": "909",
          "types": [
            "street_number"
          ]
        },
        {
          "long_name": "Avenida Vicente de Carvalho",
          "short_name": "Av. Vicente de Carvalho",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Vila Cosmos",
          "short_name": "Vila Cosmos",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Rio de Janeiro",
          "short_name": "Rio de Janeiro",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Rio de Janeiro",
          "short_name": "RJ",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Brazil",
          "short_name": "BR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "21210-000",
          "short_name": "21210-000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Av. Vicente de Carvalho, 909 - 71 - Vila Cosmos, Rio de Janeiro - RJ,
21210-000, Brazil",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": -22.8501074,
            "lng": -43.3113043
          },
          "southwest": {
            "lat": -22.8501828,
            "lng": -43.3113942
          }
        },
        "location": {
          "lat": -22.8501392,
          "lng": -43.31134650000001
        },
        "location_type": "ROOFTOP",
        "viewport": {
          "northeast": {
            "lat": -22.8487961197085,
            "lng": -43.3100002697085
          },
          "southwest": {
            "lat": -22.8514940802915,
            "lng": -43.3126982302915
          }
        }
      },
      "partial_match": true,
      "place_id": "ChIJxUfJ7KJ8mQARBwlgUC4Q0t0",
      "types": [
        "subpremise"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 18:

For given invalid address component “71,000 ” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=71,000&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 19: For given valid address component ”21526” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=21526&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Rochefort-sur-Brévon",
          "short_name": "Rochefort-sur-Brévon",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Côte-d'Or",
          "short_name": "Côte-d'Or",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Bourgogne-Franche-Comté",
          "short_name": "Bourgogne-Franche-Comté",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "France",
          "short_name": "FR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "21510",
          "short_name": "21510",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "21510 Rochefort-sur-Brévon, France",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 47.759432,
            "lng": 4.749819
          },
          "southwest": {
            "lat": 47.721753,
            "lng": 4.6732149
          }
        },
        "location": {
          "lat": 47.74288199999999,
          "lng": 4.702895000000001
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 47.759432,
            "lng": 4.749819
          },
          "southwest": {
            "lat": 47.721753,
            "lng": 4.6732149
          }
        }
      },
      "place_id": "ChIJkdoF8Xuj7UcRkEYUszTOCQQ",
      "types": [
        "locality",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 20: For given valid address component ” 02566” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=02566&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

…

```
"status": "OK"
```

…

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Ognes",
          "short_name": "Ognes",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Aisne",
          "short_name": "Aisne",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Hauts-de-France",
          "short_name": "Hauts-de-France",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "France",
          "short_name": "FR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "02300",
          "short_name": "02300",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "02300 Ognes, France",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 49.6365139,
            "lng": 3.208921
          },
          "southwest": {
            "lat": 49.5950599,
            "lng": 3.16967
          }
        },
        "location": {
          "lat": 49.610955,
          "lng": 3.1949869
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 49.6365139,
            "lng": 3.208921
          },
          "southwest": {
            "lat": 49.5950599,
            "lng": 3.16967
          }
        }
      },
      "place_id": "ChIJWc_n5W9r6EcR4NtpgT7xCgQ",
      "types": [
        "locality",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 21: For given valid point of interest ” Brooklyn Bridge” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Brooklyn+Bridge&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Brooklyn Bridge",
          "short_name": "Brooklyn Bridge",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Brooklyn Bridge",
          "short_name": "Brooklyn Bridge",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Manhattan",
          "short_name": "Manhattan",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "New York",
          "short_name": "New York",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "New York County",
          "short_name": "New York County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "New York",
          "short_name": "NY",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "10038",
          "short_name": "10038",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Brooklyn Bridge, New York, NY 10038, USA",
      "geometry": {
        "location": {
          "lat": 40.7060855,
          "lng": -73.9968643
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 40.7084499,
            "lng": -73.9920949
          },
          "southwest": {
            "lat": 40.7031689,
            "lng": -73.99985219999999
          }


        }
      },
      "place_id": "ChIJK3vOQyNawokRXEa9errdJiU",
      "types": [
        "establishment",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 22: For given valid point of interest ” Taj Mahal” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Taj+Mahal&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Taj Mahal",
          "short_name": "Taj Mahal",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Dharmapuri",
          "short_name": "Dharmapuri",
          "types": [
            "neighborhood",
            "political"
          ]
        },
        {
          "long_name": "Forest Colony",
          "short_name": "Forest Colony",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_2"
          ]
        },
        {
          "long_name": "Tajganj",
          "short_name": "Tajganj",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Agra",
          "short_name": "Agra",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Agra",
          "short_name": "Agra",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Uttar Pradesh",
          "short_name": "UP",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "India",
          "short_name": "IN",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "282001",
          "short_name": "282001",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Taj Mahal, Dharmapuri, Forest Colony, Tajganj, Agra, Uttar Pradesh 282001,
India",
      "geometry": {
        "location": {
          "lat": 27.1750151,
          "lng": 78.0421552
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 27.1763640802915,
            "lng": 78.04350418029151
          },
          "southwest": {
            "lat": 27.1736661197085,
            "lng": 78.04080621970849
          }
        }
      },
      "place_id": "ChIJbf8C1yFxdDkR3n12P4DkKt0",
      "types": [
        "establishment",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 23: For given valid point of interest ” Sebilj” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?address=Sebilj&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Sebilj",
          "short_name": "Sebilj",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Baščaršija",
          "short_name": "Baščaršija",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Stari Grad Sarajevo",
          "short_name": "Stari Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Sebilj, Baščaršija, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "location": {
          "lat": 43.859721,
          "lng": 18.431241
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.8610699802915,
            "lng": 18.4325899802915
          },
          "southwest": {
            "lat": 43.8583720197085,
            "lng": 18.4298920197085
          }
        }
      },
      "place_id": "ChIJ9RS5r8nIWEcRmUg4cKzupAE",
      "types": [
        "establishment",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 24: For given valid point of interest ” Plitvička jezera” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Plitvička+jezera&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Plitvice Lakes National Park",
          "short_name": "Plitvice Lakes National Park",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Plitvički Ljeskovac",
          "short_name": "Plitvički Ljeskovac",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Općina Plitvička Jezera",
          "short_name": "Općina Plitvička Jezera",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Ličko-senjska županija",
          "short_name": "Ličko-senjska županija",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Croatia",
          "short_name": "HR",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "53231",
          "short_name": "53231",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Plitvice Lakes National Park, 53231, Plitvički Ljeskovac, Croatia",
      "geometry": {
        "location": {
          "lat": 44.8653966,
          "lng": 15.5820119
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 44.86674558029149,
            "lng": 15.5833608802915
          },
          "southwest": {
            "lat": 44.8640476197085,
            "lng": 15.5806629197085
          }
        }
      },
      "place_id": "ChIJPQ_Z_mxeYUcRcF6aN_iPGgU",
      "types": [
        "establishment",
        "park",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 25: For given valid name of river ”Nil ” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Nil&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "River Nile",
          "short_name": "River Nile",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Sudan",
          "short_name": "SD",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "River Nile, Sudan",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 22.006193,
            "lng": 35.69729090000001
          },
          "southwest": {
            "lat": 15.9642631,
            "lng": 31.8534791
          }
        },
        "location": {
          "lat": 17.1142529,
          "lng": 33.7964613
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 22.006193,
            "lng": 35.69729090000001
          },
          "southwest": {
            "lat": 15.9642631,
            "lng": 31.8534791
          }
        }
      },
      "place_id": "ChIJW46YJ3DFgRYR-2wY5fgnqJw",
      "types": [
        "administrative_area_level_1",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 26: For given valid address component ”71000” and valid parameter of region “bs” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=71000&region=ba&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.96567839999999,
            "lng": 18.5122325
          },
          "southwest": {
            "lat": 43.8235436,
            "lng": 18.2528778
          }
        },
        "location": {
          "lat": 43.87966369999999,
          "lng": 18.4072861
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.96567839999999,
            "lng": 18.5122325
          },
          "southwest": {
            "lat": 43.8235436,
            "lng": 18.2528778
          }
        }
      },
      "place_id": "ChIJy1WaPp_OWEcRTFmUJsThC_Q",
      "types": [
        "postal_code"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 27: For given valid address component “marka marulica” and valid component=country:bs” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=marka+marulica&components=country:ba&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        },
        "location": {
          "lat": 43.915886,
          "lng": 17.679076
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        }
      },
      "partial_match": true,
      "place_id": "ChIJ16k3xxWiSxMRDOm3QwPi920",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 28: For given invalid address “nemarka nemarulica” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=nemarka+nemarulica&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

…

"status": "ZERO_RESULTS"

…

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 29: For given invalid address “nemilana nepreloga” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?address=nemilana+nepreloga&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

…

`"status": "OK"`

…

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Milana Preloga",
          "short_name": "Milana Preloga",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Milana Preloga, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.84863929999999,
            "lng": 18.3783721
          },
          "southwest": {
            "lat": 43.8462898,
            "lng": 18.3735743
          }
        },
        "location": {
          "lat": 43.84753,
          "lng": 18.375606
        },
        "location_type": "GEOMETRIC_CENTER",
        "viewport": {
          "northeast": {
            "lat": 43.84881353029149,
            "lng": 18.3783721
          },
          "southwest": {
            "lat": 43.84611556970849,
            "lng": 18.3735743
          }
        }
      },
      "partial_match": true,
      "place_id": "ChIJucW1cBLJWEcR9uDIKcziT8o",
      "types": [
        "route"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 30: For given invalid address “nemilana nepreloga 514578” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=nemilana+nepreloga+514578&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 31: For given valid address components which exclude each other, valid administrative_area “NY” and valid country “GB” return status: "ZERO_RESULTS"

API request:
https://maps.googleapis.com/maps/api/geocode/json?components=administrative_area:NY|country:GB&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 32: For given valid address components which exclude each other, valid administrative_area “Zagreb” and valid country “BA” return status: "ZERO_RESULTS"

API request:
https://maps.googleapis.com/maps/api/geocode/json?components=administrative_area:ZG|country:BA&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "ZERO_RESULTS"
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 33: For given valid address components which include each other, valid address “Hrasno ”valid administrative_area “Novo Sarajevo”, valid country “BA” return status: "OK"

API request:
https://maps.googleapis.com/maps/api/geocode/json?address=Hrasno&components=administrative_area:Novo+Sarajevo|country:BA&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
 "results": [
   {
     "address_components": [
       {
         "long_name": "Hrasno",
         "short_name": "Hrasno",
         "types": [
           "neighborhood",
           "political"
         ]
       },
       {
         "long_name": "Sarajevo",
         "short_name": "Sarajevo",
         "types": [
           "locality",
           "political"
         ]
       },
       {
         "long_name": "Kanton Sarajevo",
         "short_name": "Kanton Sarajevo",
         "types": [
           "administrative_area_level_2",
           "political"
         ]
       },
       {
         "long_name": "Federation of Bosnia and Herzegovina",
         "short_name": "Federation of Bosnia and Herzegovina",
         "types": [
           "administrative_area_level_1",
           "political"
         ]
       },
       {
         "long_name": "Bosnia and Herzegovina",
         "short_name": "BA",
         "types": [
           "country",
           "political"
         ]
       },
       {
         "long_name": "71000",
         "short_name": "71000",
         "types": [
           "postal_code"
```

```
          ]
        }
      ],
      "formatted_address": "Hrasno, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.851152,
            "lng": 18.3892143
          },
          "southwest": {
            "lat": 43.845558,
            "lng": 18.3730566
          }
        },
        "location": {
          "lat": 43.849751,
          "lng": 18.3823847
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.851152,
            "lng": 18.3892143
          },
          "southwest": {
            "lat": 43.845558,
            "lng": 18.3730566
          }
        }
      },
      "place_id": "ChIJWUOjqRHJWEcRJal6B7aCROQ",
      "types": [
        "neighborhood",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 34: For given valid latlng ” 43.8469294,18.3742449” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
```

```
        "long_name": "12A",
        "short_name": "12A",
        "types": [
          "street_number"
        ]
      },
      {
        "long_name": "Milana Preloga",
        "short_name": "Milana Preloga",
        "types": [
          "route"
        ]
      },
      {
        "long_name": "Novi Grad Sarajevo",
        "short_name": "Novi Grad Sarajevo",
        "types": [
          "political",
          "sublocality",
          "sublocality_level_1"
        ]
      },
      {
        "long_name": "Sarajevo",
        "short_name": "Sarajevo",
        "types": [
          "locality",
          "political"
        ]
      },
      {
        "long_name": "Kanton Sarajevo",
        "short_name": "Kanton Sarajevo",
        "types": [
          "administrative_area_level_2",
          "political"
        ]
      },
      {
        "long_name": "Federacija Bosne i Hercegovine",
        "short_name": "Federacija Bosne i Hercegovine",
        "types": [
          "administrative_area_level_1",
          "political"
        ]
      },
      {
        "long_name": "Bosnia and Herzegovina",
        "short_name": "BA",
        "types": [
          "country",
          "political"
        ]
      },
      {
        "long_name": "71000",
        "short_name": "71000",
        "types": [
          "postal_code"
        ]
      }
    ],
    "formatted_address": "Milana Preloga 12A, Sarajevo 71000, Bosnia and Herzegovina",
    "geometry": {
        "location": {
          "lat": 43.8469294,
          "lng": 18.3742449
        },
        "location_type": "ROOFTOP",
        "viewport": {
          "northeast": {
            "lat": 43.8482783802915,
            "lng": 18.3755938802915
          },
          "southwest": {
            "lat": 43.8455804197085,
            "lng": 18.3728959197085
          }
        }
      },
      "place_id": "ChIJCWO2aA3JWEcRGQFpipDqbWY",
      "types": [
        "street_address"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Hrasno",
          "short_name": "Hrasno",
          "types": [
            "neighborhood",
            "political"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Hrasno, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.851152,
            "lng": 18.3892143
          },
          "southwest": {
            "lat": 43.845558,
            "lng": 18.3730566
          }
        },
        "location": {
          "lat": 43.849751,
          "lng": 18.3823847
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.851152,
            "lng": 18.3892143
          },
          "southwest": {
            "lat": 43.845558,
            "lng": 18.3730566
          }
        }
      },
      "place_id": "ChIJWUOjqRHJWEcRJal6B7aCROQ",
      "types": [
        "neighborhood",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Novo Sarajevo",
          "short_name": "Novo Sarajevo",
          "types": [
            "administrative_area_level_3",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Novi Grad Sarajevo, Sarajevo, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.9152691,
            "lng": 18.3781313
          },
          "southwest": {
            "lat": 43.8209701,
            "lng": 18.2488275
          }
        },
        "location": {
          "lat": 43.8746661,
          "lng": 18.3241353
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.9152691,
            "lng": 18.3781313
          },
          "southwest": {
            "lat": 43.8209701,
            "lng": 18.2488275
          }
        }
      },
      "place_id": "ChIJZ04a4NnLWEcRjL36_U4Wftw",
      "types": [
        "political",
        "sublocality",
        "sublocality_level_1"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Sarajevo, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.9664726,
            "lng": 18.5171986
          },
          "southwest": {
            "lat": 43.820974,
            "lng": 18.2487844
          }
        },
        "location": {
          "lat": 43.8562586,
          "lng": 18.4130763
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.9664726,
            "lng": 18.5171986
          },
          "southwest": {
            "lat": 43.820974,
            "lng": 18.2487844
          }
        }
      },
      "place_id": "ChIJ0Ztx7bHLWEcRPrOH3qbNLlY",
      "types": [
        "locality",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "administrative_area_level_3",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Novi Grad Sarajevo, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.9152691,
            "lng": 18.3781313
          },
          "southwest": {
            "lat": 43.8209701,
            "lng": 18.2488275
          }
        },
        "location": {
          "lat": 43.8786277,
          "lng": 18.3001767
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.9152691,
            "lng": 18.3781313
          },
          "southwest": {
            "lat": 43.8209701,
            "lng": 18.2488275
          }
        }
      },
      "place_id": "ChIJ634BKn_LWEcRtQj6Epqe8JY",
      "types": [
        "administrative_area_level_3",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 43.96567839999999,
            "lng": 18.5122325
          },
          "southwest": {
            "lat": 43.8235436,
            "lng": 18.2528778
          }
        },
      "location": {
        "lat": 43.87966369999999,
        "lng": 18.4072861
      },
      "location_type": "APPROXIMATE",
      "viewport": {
        "northeast": {
          "lat": 43.96567839999999,
          "lng": 18.5122325
        },
        "southwest": {
          "lat": 43.8235436,
          "lng": 18.2528778
        }
      }
    },
    "place_id": "ChIJy1WaPp_OWEcRTFmUJsThC_Q",
    "types": [
      "postal_code"
    ]
  },
  {
    "address_components": [
      {
        "long_name": "Kanton Sarajevo",
        "short_name": "Kanton Sarajevo",
        "types": [
          "administrative_area_level_2",
          "political"
        ]
      },
      {
        "long_name": "Federacija Bosne i Hercegovine",
        "short_name": "Federacija Bosne i Hercegovine",
        "types": [
          "administrative_area_level_1",
          "political"
        ]
      },
      {
        "long_name": "Bosnia and Herzegovina",
        "short_name": "BA",
        "types": [
          "country",
          "political"
        ]
      }
    ],
    "formatted_address": "Kanton Sarajevo, Bosnia and Herzegovina",
    "geometry": {
      "bounds": {
        "northeast": {
          "lat": 44.1194347,
          "lng": 18.6752687
        },
        "southwest": {
          "lat": 43.5873569,
          "lng": 18.0048674
        }
      },
      "location": {
        "lat": 43.8512564,
        "lng": 18.2953442
      },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 44.1194347,
            "lng": 18.6752687
          },
          "southwest": {
            "lat": 43.5873569,
            "lng": 18.0048674
          }
        }
      },
      "place_id": "ChIJm69MftrLWEcRy6sDQO0R8QQ",
      "types": [
        "administrative_area_level_2",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Federation of Bosnia and Herzegovina",
          "short_name": "Federation of Bosnia and Herzegovina",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Federation of Bosnia and Herzegovina, Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.2271323,
            "lng": 19.0392512
          },
          "southwest": {
            "lat": 42.6075035,
            "lng": 15.7237473
          }
        },
        "location": {
          "lat": 43.8874897,
          "lng": 17.842793
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 45.2271323,
            "lng": 19.0392389
          },
          "southwest": {
            "lat": 42.6075035,
            "lng": 15.7237473
          }
        }
      },
      "place_id": "ChIJU5OpZm2oX0cRS7IhJeWTkuw",
      "types": [
        "administrative_area_level_1",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        },
        "location": {
          "lat": 43.915886,
          "lng": 17.679076
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        }
      },
      "place_id": "ChIJ16k3xxWiSxMRDOm3QwPi920",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 35: For given valid latlng ” 43.8469294,18.3742449” and valid parameter location_type “ROOFTOP” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&location_type=ROOFTOP&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "12A",
          "short_name": "12A",
          "types": [
            "street_number"
          ]
        },
        {
          "long_name": "Milana Preloga",
          "short_name": "Milana Preloga",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Milana Preloga 12A, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "location": {
          "lat": 43.8469294,
          "lng": 18.3742449
        },
        "location_type": "ROOFTOP",
        "viewport": {
          "northeast": {
            "lat": 43.8482783802915,
            "lng": 18.3755938802915
          },
          "southwest": {
            "lat": 43.8455804197085,
            "lng": 18.3728959197085
          }
        }
      },
      "place_id": "ChIJCWO2aA3JWEcRGQFpipDqbWY",
      "types": [
        "street_address"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 36: For given valid place_id “ChIJDTm0aA3JWEcRuOqwsTuKaB8” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=ChIJDTm0aA3JWEcRuOqwsTuKaB8&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "AtlantBH",
          "short_name": "AtlantBH",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "AtlantBH, Milana Preloga 12A, Bosmal City Center, Sarajevo 71000, Bosnia
and Herzegovina",
      "geometry": {
        "location": {
          "lat": 43.8469294,
          "lng": 18.3742449
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 43.8482783802915,
            "lng": 18.3755938802915
          },
          "southwest": {
            "lat": 43.8455804197085,
            "lng": 18.3728959197085
          }
        }
      },
      "place_id": "ChIJDTm0aA3JWEcRuOqwsTuKaB8",
      "types": [
        "establishment",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 37: For given valid place_id "ChIJPTacEpBQwokRKwIlDXelxkA" return status "OK"

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=ChIJPTacEpBQwokRKwIlDXelxkA&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Statue of Liberty National Monument",
          "short_name": "Statue of Liberty National Monument",
          "types": [
            "establishment",
            "park",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Manhattan",
          "short_name": "Manhattan",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "New York",
          "short_name": "New York",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "New York County",
          "short_name": "New York County",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "New York",
          "short_name": "NY",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "United States",
          "short_name": "US",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "10004",
          "short_name": "10004",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Statue of Liberty National Monument, New York, NY 10004, USA",
      "geometry": {
        "location": {
          "lat": 40.6892494,
          "lng": -74.04450039999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 40.6905983802915,
            "lng": -74.04315141970848
          },
          "southwest": {
            "lat": 40.6879004197085,
            "lng": -74.04584938029149
          }
        }
      },
      "place_id": "ChIJPTacEpBQwokRKwIlDXelxkA",
      "types": [
        "establishment",
        "park",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 38: For given valid place_id “ChIJUXEm-2Q7iBMRkHMtWNxrQNY” return status “OK”

API request:

https://maps.googleapis.com/maps/api/geocode/json?place_id=ChIJUXEm-2Q7iBMRkHMtWNxrQNY&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Sahara Desert",
          "short_name": "Sahara Desert",
          "types": [
            "establishment",
            "natural_feature"
          ]
        }
      ],
      "formatted_address": "Sahara Desert",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 31.7655374,
            "lng": 32.4096679
          },
          "southwest": {
            "lat": 12.6832149,
            "lng": 11.8212891
          }
        },
        "location": {
          "lat": 23.4162027,
          "lng": 25.66283
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 31.7655374,
            "lng": 32.4096679
          },
          "southwest": {
            "lat": 12.6832149,
            "lng": 11.8212891
          }
        }
      },
      "place_id": "ChIJUXEm-2Q7iBMRkHMtWNxrQNY",
      "types": [
        "establishment",
        "natural_feature"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 39: For given invalid place_id “CHkmdaskmdMRI3msajkokored52” return status “INVALID_REQUEST”

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=CHkmdaskmdMRI3msajkokored52&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “INVALID_REQUEST”
…
```

```
{
  "error_message": "Invalid request. Invalid 'place_id' parameter.",
  "results": [],
  "status": "INVALID_REQUEST"
}
```

TEST CASE 40: For given valid place_id ” ChIJ16k3xxWiSxMRDOm3QwPi920” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=ChIJ16k3xxWiSxMRDOm3QwPi920&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
"status": "OK"
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Bosnia and Herzegovina",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        },
        "location": {
          "lat": 43.915886,
          "lng": 17.679076
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 45.2766262,
            "lng": 19.621935
          },
          "southwest": {
            "lat": 42.5564516,
            "lng": 15.7223665
          }
        }
      },
      "place_id": "ChIJ16k3xxWiSxMRDOm3QwPi920",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 41: For given valid place_id “ChIJzyx_aNch8TUR3yIFlZslQNA” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=ChIJzyx_aNch8TUR3yIFlZslQNA&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Great Wall of China",
          "short_name": "Great Wall of China",
          "types": [
            "establishment",
            "point_of_interest"
          ]
        },
        {
          "long_name": "Huairou Qu",
          "short_name": "Huairou Qu",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Beijing Shi",
          "short_name": "Beijing Shi",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "China",
          "short_name": "CN",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "101405",
          "short_name": "101405",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Great Wall of China, Huairou Qu, China, 101405",
      "geometry": {
        "location": {
          "lat": 40.4319077,
          "lng": 116.5703749
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 40.4332566802915,
            "lng": 116.5717238802915
          },
          "southwest": {
            "lat": 40.4305587197085,
            "lng": 116.5690259197085
          }
        }
      },
      "place_id": "ChIJzyx_aNch8TUR3yIFlZslQNA",
      "types": [
        "establishment",
        "point_of_interest"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 42: For given valid latlng “0,0” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=0,0&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “ZERO_RESULTS”
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 43: For given valid latlng “-90,180” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=-90,180&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Antarctica",
          "short_name": "AQ",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Antarctica",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": -60.1086999,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        },
        "location": {
          "lat": -75.250973,
          "lng": -0.071388999999999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": -61.05080580000001,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        }
      },
      "place_id": "ChIJS3WQM3uWuaQRdSAPdB--Um4",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 44: For given valid latlng “-90,-180” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=-90,-180&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Antarctica",
          "short_name": "AQ",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Antarctica",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": -60.1086999,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        },
        "location": {
          "lat": -75.250973,
          "lng": -0.07138899999999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": -61.05080580000001,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        }
      },
      "place_id": "ChIJS3WQM3uWuaQRdSAPdB--Um4",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 45: For given valid latlng “-90,0” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=-90,0&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "Antarctica",
          "short_name": "AQ",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Antarctica",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": -60.1086999,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        },
        "location": {
          "lat": -75.250973,
          "lng": -0.07138899999999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": -61.05080580000001,
            "lng": 180
          },
          "southwest": {
            "lat": -90,
            "lng": -180
          }
        }
      },
      "place_id": "ChIJS3WQM3uWuaQRdSAPdB--Um4",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
```

TEST CASE 46: For given valid latlng “90,0” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=90,0&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “ZERO_RESULTS”
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 47: For given valid latlng “15,42” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=15,42&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “ZERO_RESULTS”
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 48: For given valid latlng “53.256455656464,95.136968484” return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=53.256455656464,95.136968484&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "668540",
          "short_name": "668540",
          "types": [
            "postal_code"
          ]
        },
        {
          "long_name": "Tuva",
          "short_name": "Tuva",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Russia",
          "short_name": "RU",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Tuva, Russia, 668540",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 53.4693659,
            "lng": 95.70414300000002
          },
          "southwest": {
            "lat": 52.087172,
            "lng": 94.984104
          }
        },
        "location": {
          "lat": 52.6628534,
          "lng": 95.45994069999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 53.4693659,
            "lng": 95.70414300000002
          },
          "southwest": {
            "lat": 52.087172,
            "lng": 94.984104
          }
        }
      },
      "place_id": "ChIJhxEJU75HI10RCq_U3n30Tws",
      "types": [
        "postal_code"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Todzhinskiy rayon",
          "short_name": "Todzhinskiy r-n",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Tyva Republits",
          "short_name": "Tyva Republits",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Russia",
          "short_name": "RU",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Todzhinskiy r-n, Tyva Republits, Russia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 53.727431,
            "lng": 99.269666
          },
          "southwest": {
            "lat": 51.5938859,
            "lng": 94.475826
          }
        },
        "location": {
          "lat": 52.8305494,
          "lng": 97.1538114
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 53.727431,
            "lng": 99.269666
          },
          "southwest": {
            "lat": 51.5938859,
            "lng": 94.475826
          }
        }
      },
      "place_id": "ChIJkWZnWE8FGF0RDsrcxaIVuqE",
      "types": [
        "administrative_area_level_2",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Tuva",
          "short_name": "Tuva",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Russia",
          "short_name": "RU",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Tuva, Russia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 53.727431,
            "lng": 99.269666
          },
          "southwest": {
            "lat": 49.7417159,
            "lng": 88.7985341
          }
        },
        "location": {
          "lat": 51.8872669,
          "lng": 95.62601719999999
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 53.727431,
            "lng": 99.269666
          },
          "southwest": {
            "lat": 49.7417159,
            "lng": 88.7985341
          }
        }
      },
      "place_id": "ChIJ9UKBC9azO10RIJVFUq_GAwE",
      "types": [
        "administrative_area_level_1",
        "political"
      ]
    },
    {
      "address_components": [
        {
          "long_name": "Russia",
          "short_name": "RU",
          "types": [
            "country",
            "political"
          ]
        }
      ],
      "formatted_address": "Russia",
      "geometry": {
        "bounds": {
          "northeast": {
            "lat": 82.1673907,
            "lng": -168.97788
          },
          "southwest": {
            "lat": 41.185353,
            "lng": 19.6160999
          }
        },
        "location": {
          "lat": 61.52401,
          "lng": 105.318756
        },
        "location_type": "APPROXIMATE",
        "viewport": {
          "northeast": {
            "lat": 70,
            "lng": 179
          },
          "southwest": {
            "lat": 40,
            "lng": 27
          }
        }
      },
      "place_id": "ChIJ-yRniZpWPEURE_YRZvj9CRQ",
      "types": [
        "country",
        "political"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 49: For given invalid latlng “250,350” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=250,350&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “ZERO_RESULTS”
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 50: For given invalid latlng “AASDF,NIJ;O” return status “ZERO_RESULTS”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=AASDF,NIJ;O&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “ZERO_RESULTS”
…
```

```
{
  "results": [],
  "status": "ZERO_RESULTS"
}
```

TEST CASE 51: For given valid latlng ” 43.8469294,18.3742449”, valid parameter location_type “ROOFTOP” and result type “street_address”return status “OK”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&location_type=ROOFTOP&result_type=street_address&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “OK”
…
```

```
{
  "results": [
    {
      "address_components": [
        {
          "long_name": "12A",
          "short_name": "12A",
          "types": [
            "street_number"
          ]
        },
        {
          "long_name": "Milana Preloga",
          "short_name": "Milana Preloga",
          "types": [
            "route"
          ]
        },
        {
          "long_name": "Novi Grad Sarajevo",
          "short_name": "Novi Grad Sarajevo",
          "types": [
            "political",
            "sublocality",
            "sublocality_level_1"
          ]
        },
        {
          "long_name": "Sarajevo",
          "short_name": "Sarajevo",
          "types": [
            "locality",
            "political"
          ]
        },
        {
          "long_name": "Kanton Sarajevo",
          "short_name": "Kanton Sarajevo",
          "types": [
            "administrative_area_level_2",
            "political"
          ]
        },
        {
          "long_name": "Federacija Bosne i Hercegovine",
          "short_name": "Federacija Bosne i Hercegovine",
          "types": [
            "administrative_area_level_1",
            "political"
          ]
        },
        {
          "long_name": "Bosnia and Herzegovina",
          "short_name": "BA",
          "types": [
            "country",
            "political"
          ]
        },
        {
          "long_name": "71000",
          "short_name": "71000",
          "types": [
            "postal_code"
          ]
        }
      ],
      "formatted_address": "Milana Preloga 12A, Sarajevo 71000, Bosnia and Herzegovina",
      "geometry": {
        "location": {
          "lat": 43.8469294,
          "lng": 18.3742449
        },
        "location_type": "ROOFTOP",
        "viewport": {
          "northeast": {
            "lat": 43.8482783802915,
            "lng": 18.3755938802915
          },
          "southwest": {
            "lat": 43.8455804197085,
            "lng": 18.3728959197085
          }
        }
      },
      "place_id": "ChIJCWO2aA3JWEcRGQFpipDqbWY",
      "types": [
        "street_address"
      ]
    }
  ],
  "status": "OK"
}
```

TEST CASE 52: For given valid latlng ” 43.8469294,18.3742449”, valid parameter location_type “ROOFTOP” and result type “street_address”, but without API key, return status “REQUEST_DENIED”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&location_type=ROOFTOP&result_type=street_address&key=

API result:

```
…
“status”: “REQUEST DENIED”
…
```

```
{
  "error_message": "This functionality is only available if an API key or a client ID is provided: result_type",
  "results": [],
  "status": "REQUEST_DENIED"
}
```

TEST CASE 53: For given valid latlng ” 43.8469294,18.3742449” and valid parameter location_type “ROOFTOP”, but without return status “REQUEST_DENIED”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&location_type=ROOFTOP&key=

API result:

```
…
“status”: “REQUEST_DENIED”
…
```

```
{
  "error_message": "This functionality is only available if an API key or a client ID is provided: location_type",
  "results": [],
  "status": "REQUEST_DENIED"
}
```

TEST CASE 54: For given valid latlng ” 43.8469294,18.3742449” and valid parameter result type “street_address” return status “REQUEST_DENIED”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=43.8469294,18.3742449&result_type=street_address&key=

API result:

```
…
“status”: “REQUEST_DENIED”
…
```

```
{
  "error_message": "This functionality is only available if an API key or a client ID is provided:
result_type",
  "results": [],
  "status": "REQUEST_DENIED"
}
```

TEST CASE 55: For given no latlng return status “INVALID_REQUEST ”

API request:
https://maps.googleapis.com/maps/api/geocode/json?latlng=&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “INVALID_REQUEST”
…
```

```
{
  "error_message": "Invalid request. Missing the 'address', 'bounds', 'components', 'latlng' or
'place_id' parameter.",
  "results": [],
  "status": "INVALID_REQUEST"
}
```

TEST CASE 56: For given no place_id return status “INVALID REQUEST ”

API request:
https://maps.googleapis.com/maps/api/geocode/json?place_id=&key=AIzaSyCGNaPfn1SWg0emTNNC8jKVB1Y0HF6VzGY

API result:

```
…
“status”: “INVALID_REQUEST”
…
```

```
{
  "error_message": "Invalid request. Invalid 'place_id' parameter.",
  "results": [],
  "status": "INVALID_REQUEST"
}
```

2. From all the test cases, identify what you think represents a Smoke Test

The smoke test is the most basic test which checks if a web service works. We are sending the minimal set of data in API request, and waiting for positive answer, in this case “status”=”OK”. Smoke tests from all the test cases are:Test case 1 (Europe), Test case 3 (Sarajevo), Test case 13 (1) and Test case 14 (2).

3. Identify at least one positive and one negative test for both forward and reverse geocoding

Positive test cases (TC) for forward geocoding are:

- TC 1 (Europe),
- TC 2 (Švedska),
- TC 3 (Sarajevo),
- TC 4 (Marka Marulica),
- TC 5 (marka marulica, sarajevo),
- TC 6 (Marka Marulića 19, Sarajevo),
- TC 7 (Milana Preloga 12A),

Negative test cases (TC) for forward geocoding are:

- TC 8 (skljmnnnd345čklkčlkčk),
- TC 9 (111111111111112222222222555555588884111111116666666666),
- TC 10 (no address),
- TC 30 (nemilana nepreloga 514578),
- TC 31 (For given valid address components which exclude each other, valid administrative_area “NY” and valid country “GB”),
- TC 32 (For given valid address components which exclude each other, valid administrative_area “Zagreb” and valid country “BA”).

Positive test cases (TC) for reverse geocoding are:

- TC 36 (valid place_id – The Statue of Liberty),
- TC 37 (valid place_id – The Sahara),
- TC 43 (valid latlng - Antartica),
- TC 44 (valid latlng - Antartica),
- TC 45 (valid latlng - Antartica),
- TC 51 (valid latlng, valid parameter location_type and result type “street_address”).

Negative test cases (TC) for reverse geocoding are:

- TC 42 (valid latlng, 0,0),
- TC 47 (valid latlng 15,42)
- TC 55 (no latlng)
- TC 56 (no place_id).