

Forward Geocoding API:

Documentation:

<https://docs.mapbox.com/api/search/geocoding/#forward-geocoding>

API key

XXXXXXXXXXXX

Please generate api key from Mapbox API

Sample request:

<https://docs.mapbox.com/api/search/geocoding/#example-request-forward-geocoding>

curl

```
"https://api.mapbox.com/geocoding/v5/mapbox.places/Washington.json?limit=2&access_token=XXXXXXXXXXXX"
```

Sample response:

<https://docs.mapbox.com/api/search/geocoding/#example-response-forward-geocoding>

```
{
  "type": "FeatureCollection",
  "query": [
    "washington"
  ],
  "features": [
    {
      "id": "region.9713796497246050",
      "type": "Feature",
      "place_type": [
        "region"
      ],
      "relevance": 1,
      "properties": {
        "wikidata": "Q1223",
        "short_code": "US-WA"
      },
      "text": "Washington",
      "place_name": "Washington, United States",
      "bbox": [
        -124.862197896945,
        45.5435400017256,
        -116.916070668425,
        49.0121490866648
      ]
    }
  ]
}
```

```
],
"center":[
  -120.094292506456,
  48.0250054263
],
"geometry":{
  "type":"Point",
  "coordinates":[
    -120.094292506456,
    48.0250054263
  ]
},
"context":[
  {
    "id":"country.19678805456372290",
    "wikidata":"Q30",
    "short_code":"us",
    "text":"United
    States"
  }
],
},
{
  "id":"place.7673410831246050",
  "type":"Feature",
  "place_type":[
    "place"
  ],
  "relevance":1,
  "properties":{
    "wikidata":"Q61"
  },
  "text":"Washington",
  "place_name":"Washington, District of Columbia, United States",
  "bbox":[
    -77.1197609567342,
    38.79155738,
    -76.909391,
    38.99555093
  ],
  "center":[
    -77.0366,
    38.895
  ],
  "geometry":{
```

```

    "type": "Point",
    "coordinates": [
      -77.0366,
      38.895
    ]
  },
  "context": [
    {
      "id": "region.14064402149979320",
      "wikidata": "Q3551781",
      "short_code": "US-DC",
      "text": "District of Columbia"
    },
    {
      "id": "country.19678805456372290",
      "wikidata": "Q30",
      "short_code": "us",
      "text": "United States"
    }
  ]
},
{
  "attribution": "NOTICE: © 2021 Mapbox and its suppliers. All rights reserved. Use of this data is subject to the Mapbox Terms of Service (https://www.mapbox.com/about/maps/). This response and the information it contains may not be retained. POI(s) provided by Foursquare."
}

```

Assessment question:

Using any framework of your choice (or core php/python) develop an API as a wrapper around Mapbox Forward Geocoding API i.e given a place name (city or town) it returns the latitude and longitude details in the response.

The API should support two input parameters names and format as below::

- 1) names - string - mandatory input - it can take 1 to 3 city/place names (more than 3 should not be supported)
- 2) format - boolean - default false - when false, returns response in json format. When true, return response in comma separated format as below:

	A	B	C
1	name	latitute	longtitude
2	Bangalore	12.972442	77.580643
3	Chennai	13.067439	80.237617
4			

- 3) The successful API response from Mapbox needs to be cached in a RBMS. Once the results are cached, the subsequent request to same place name(s) to fetch the data from the database instead of invoking Mapbox API

You are free to use the web/search engines/code snippets, however you must be able to explain the code that you use. Ensure the code adheres to production standards (i.e., following all best practices).

Evaluation will be based on Q&A, functional correctness, robustness, validations, error handling and adherence to coding standards.