## **Backend Coding Test**

You need to create a REST service that can fetch bank details, using the data given in the API's query parameters.

You can use the data available in this <u>repository</u> in your backend DB. Write your service in any language of your choice. Host it on Heroku - you can signup for a free account in Heroku. E.g. <u>Here are steps</u> on how you can get a Django app running in Heroku in a few minutes. Please use PostgreSQL as your backend DB. Since the free-tier of Heroku has a limit of 10k rows, you can use another DB provider (eg: you can use <u>clever-cloud.com</u> to host your Postgres DB by <u>following steps</u>).

Essentials your applications should have:

- Autocomplete API to return possible matches based on the branch name ordered by IFSC code (ascending order) with limit and offset.
  - a. Endpoint: /api/branches/autocomplete?q=<>
  - b. Example: /api/branches/autocomplete?q=RTGS&limit=3&offset=0
  - c. Sample response:

```
"branches": [{
 "ifsc": "ABHY0065001",
 "bank_id": 60,
 "branch": "RTGS-HO",
 "address": "ABHYUDAYA BANK BLDG., B.NO.71, NEHRU NAGAR, KURLA (E), MUMBAI-400024",
 "city": "MUMBAI",
 "district": "GREATER MUMBAI".
 "state": "MAHARASHTRA"
}, {
 "ifsc": "ABNA0000001".
 "bank_id": 110,
 "branch": "RTGS-HO",
 "address": "414 EMPIRE COMPLEX, SENAPATI BAPAT MARG LOWER PAREL WEST MUMBAI 400013",
 "city": "MUMBAI",
 "district": "GREATER BOMBAY",
 "state": "MAHARASHTRA"
}, {
 "ifsc": "ADCB0000001",
 "bank_id": 143,
 "branch": "RTGS-HO",
 "address": "75, REHMAT MANZIL, V. N. ROAD, CURCHGATE, MUMBAI - 400020",
 "city": "MUMBAI",
 "district": "MUMBAI CITY",
 "state": "MAHARASHTRA"
 "ifsc": "ADCC0000001".
```

```
"bank_id": 61,
"branch": "RTGS-HO",
"address": "THE AKOLA DISTRICT CENTRAL COOP. BANK LTD., P.B.NO. 8, CIVIL LINES, S.A. COLLEGE
ROAD, AKOLA. 444001",
"city": "AKOLA",
"district": "AKOLA",
"state": "MAHARASHTRA"
}]
}
```

- 2. Search API to return possible matches across all columns and all rows, **ordered by IFSC code** (ascending order) with limit and offset.
  - a. Endpoint: /api/branches?q=<>
  - b. Example: /api/branches?q=Bangalore&limit=4&offset=0
  - c. Sample response:

```
"branches": [{
   "ifsc": "ABNA0100318",
   "bank_id": 110,
   "branch": "BANGALORE",
   "address": "PRESTIGE TOWERS', GROUND FLOOR, 99 & 100, RESIDENCY ROAD, BANGALORE 560
025.",
   "city": "BANGALORE",
   "district": "BANGALORE URBAN",
   "state": "KARNATAKA"
  }, {
   "ifsc": "ADCB0000002",
   "bank_id": 143,
   "branch": "BANGALORE",
   "address": "CITI CENTRE, 28, CHURCH STREET, OFF M. G. ROAD BANGALORE 560001",
   "city": "BANGALORE",
   "district": "BANGALORE URBAN",
   "state": "KARNATAKA"
  }, {
   "ifsc": "ALLA0210217",
   "bank_id": 11,
   "branch": "K. G. ROAD",
   "address": "NO. 2, FKCCI BUILDING, K G ROAD, BANGALORE",
   "city": "BANGALORE",
   "district": "BANGALORE URBAN",
   "state": "KARNATAKA"
  }, {
   "ifsc": "ALLA0210326".
   "bank_id": 11,
   "branch": "BANGALORE BASAVANGUDI",
   "address": "121, RM COMPLEX, DR.D.V.GUNDAPPA ROAD, BASAVANGUDI, BANGALORE - 560004",
   "city": "BANGALORE",
   "district": "BANGALORE URBAN",
```

```
"state": "KARNATAKA"
}]
}
```

## Deliverables:

- 1. Hosting URL
- 2. Github repo link to your solution
- 3. Time taken to complete this exercise.
- 4. [IMPORTANT] Please include a curl script that makes a call to each of the above mentioned APIs in your **repo** while demonstrating the limit and offset parameters