**Where should I eat?**

In this exercise, you will use your newly acquired knowledge of making api calls to explore the food scene in Hyderabad, Banjara Hills to be specific. Your job is to first collect data on the eateries nearby, Banjara Hills.

There can be many approaches to data collection. We will use google places API. You can use ***place search api*** <https://developers.google.com/places/web-service/search> . You should first obtain the secret key to access this api, (there is a GET KEY, button on this web page, use it!!!). After you obtain the key, make an api call. Assume the latitude and longitude of Banjara Hills is:

**17.4138, 78.4398**

We are interested in restaurants that are within 500 meters of these coordinates.

**1.** Collect the following attributes of each restaurant in a dataframe (table):

(i) place\_id

(ii) name

(iii) open\_now?

(iv) rating

(v) types (**Hint:** You will have to figure out a way to collapse a list into a single string, read about join() method)

(**Hint:** It is possible that certain restaurants will not have all the available attributes, for example, there might be restaurants without any google rating. You will have to take this into account while writing your code. Make use of python’s exception handling capabilities to handle this. Refer <https://docs.python.org/2.7/tutorial/errors.html> )

**2.** Once you have obtained a table with said fields, the next thing we would like to do is figure out in this list of restaurants which ones have a bar and serve alcohol?

If you came this far, congratulations! Now, you would have noticed that there are only 20 results per query. We can increase the number of results returned by making use of pagetoken and nextpagetoken parameters. (**You will need to massively change your earlier code, here are some hints, make your code modular, create functions out of tasks that are to be repetitively done)**

You can read about pagetokens here <https://developers.google.com/places/web-service/search#PlaceSearchPaging>

**3.** Once you have figured out how to get more than 20 results per call, now make a new api call, this time generate a table like **1,** now we are interested in restaurants that are within 1500 meters of the coordinates.

**4.** Filter out the eateries that serve alcohol and report the top two by rating.

Once you have the table, created in **3,** your next task is to obtain:

1. Phone number
2. Opening and Closing hours today
3. Price Level

You can use the ***places detail***api to accomplish this task <https://developers.google.com/places/web-service/details>