

# Intake2 Pandas LAB#1

## Question#1:

- Kindly make sure that you are subscribed in <https://rapidapi.com/community/api/open-weather-map/> , and make sure also that you have access to the "Climate forecast for 30 days" endpoint
- Without the use of Postman or any other HTTP REST client, kindly depend only on Python to send a request to the above-mentioned API to get the climate forecasting of Cairo/Egypt for the coming month
- The API response is expected to be in a JSON format, please work on converting the API response to a Pandas dataframe that will contain the following columns/fields:
  - dt
  - humidity
  - pressure
  - wind\_speed
  - average
  - average\_max
  - average\_min
  - record\_max
  - record\_min

## Question#2:

- Kindly create a Pandas dataframe based on extracted data from PostgreSQL database as clarified in the following steps
- The postgresql database assumed to have the Northwind schema
- Kindly create a query to get a list of customers in addition to the number of orders they did, even if count of orders is Zero
- Depending on the above created query, kindly depend on Python to integrate with the PostgreSQL database and create a Pandas dataframe that will contain the following fields/columns:
  - company\_name
  - city
  - country
  - count
- Then based on the above created dataframe, please show only values of customers who has Zero as count of orders

### **Question#3:**

- Many people are considering the English Premier League as the most challenging champion in the entire world, and so for sure the top scorer players in this champion are great athletes, and here in this question we are going to get some data about them as clarified in the following steps
- Without the use of Selenium or any other crawling/scrapping tool, just use Python/Pandas to access the following web page:  
<https://www.premierleague.com/stats/top/players/goals?se=-1> and create a Pandas dataframe that will contain the following fields/columns:
  - Rank
  - Player Name
  - Club
  - Nationality
  - Stat/Number of Scored goals
- Kindly remember to delete 'Unnamed: 5' field if you get it in your dataframe

### **Question#4:**

- Without the use of XSLT or any tool other than Python/Pandas, let's work on converting the breakfast\_menu.xml dataset to CSV
- At the end you can ignore the "description" field
- You need to suppress the '\$' in "Price" field values
- The output CSV dataset expected to have a header and be semicolon separated and also there's no index there, it's expected to have the following fields:
  - Name
  - Price
  - Calories

### **Question#5:**

- Depending on the use of Pandas read\_CSV function, kindly fetch this remote iris dataset <https://raw.githubusercontent.com/mwaskom/seaborn-data/master/iris.csv> as a dataframe which is expected to have the following fields:
  - sepal\_length
  - sepal\_width
  - petal\_length
  - petal\_width
  - species
- Then for all numeric fields/columns, kindly show the following information:
  - Mean
  - Minimum value
  - Maximum value