## Project 5 - Data analysis on Ecommerce Purchase Dataset

- 1. Display Top 10 Rows of The Dataset
- 2. Check Last 10 Rows of The Dataset
- 3. Check Datatype of Each Column
- 4. Check null values in the dataset.
  - a. When we write isnull() method it creates boolean table
  - b. now you have to count that is there any missing value in the dataset or not?
- 5. How many rows and columns are there in our Dataset?
- 6. Show all columns first then find the length of them.
- 7. Show all number of rows
- 8. Show complete information of dataset.
- 9. Show Highest and Lowest Purchase Prices.
  - a. Try to show all columns names so that one can easily pick the column
- 10. Show average purchase price
- 11. How many people have French 'fr' as their Language?
  - a. First show all columns then all languages
  - b. Check whether 'fr' is there or not
  - c. Compare language to 'fr'
- 12. Find Job Title Contains Engineer word
  - a. Show all columns then look for 'Job' match it with 'engineer'
  - b. Show all result rows having that word
  - c. Now make your search as case insensitive
  - d. Find the length of resulting data too
- 13. Find The Email of the person with the following IP Address: 132.207.160.22
  - a. First display all column to know on which column you have to work
  - b. Compare the column to ip address and show the results
  - c. Now display email only of that IP address

- 14. How many People have Mastercard as their Credit Card Provider and made a purchase above 50 dollars?
  - a. First display columns
  - b. Do some comparisons and show numbers
- 15. Find the email of the person with the following Credit Card Number: 4664825258997302
- 16. How many people purchase during the AM and how many people purchase during PM?
- 17. How many people have a credit card that expires in 2020?
  - a. Show columns first
  - b. Check the format of date
  - c. Create a user defined function which counts how many persons having credit card expired in 2020
  - d. Iterate the date using for loop and split date and count it
  - e. Show total sum of count.

You can use any other method too.

- 18. What are the top 5 most popular email providers (e.g. Gmail.com, yahoo.com, etc...)
  - a. Create either user defined function or use your own any other way for getting the result.

Note: Can add any amount of bonus elements as you can.