

## PYTHON COOKBOOK ASSIGNMENT 2

1. Demonstrate with example, how you can select (a) **one column** (b) **two columns** of a DF. [51]
2. What will happen when you pass (a) **a string** (b) **a list** into the indexing operator of DF [52]
3. Select a single column from a DF in such a way that the result is also a DF. [52]
4. Give 2 common reasons for **KeyError** in a DF. [52]
5. Explain how you can select columns of a DF using (a) **Indexing operator** (b) **select\_dtypes()** and **filter()** methods [53]
6. Output the number of columns with each specific data type in a DF. [53]
7. Explain one main difference between **select\_dtypes()** and **filter()** methods [55]
8. Explain the difference among **like** parameter and **regex** parameter and **items** parameter used in **filter** method in a DF. [55]
9. Search for all the columns that have a special character somewhere in their name.
10. What will happen if you provide a non-existing column name in the indexing operator of a DF? [56]
11. What will happen if you provide a non-existing column name in the **list** parameter of **filter** method in a DF? [56]
12. Display rows with any **NaN** value.
13. Do you think it is useful to arrange the column names sensibly? List the guidelines to arrange the columns. [58]
14. Write the difference between **discrete** and **continuous** variables in DF.
15. What is **Primary Key** and **Foreign Key** in Relational Database.
16. While ordering (arranging) the column name, where will you place the Primary Key and the Foreign Key of the data ? Do all the datasets have Primary and Foreign Keys ?
17. List the basic **descriptive attributes** and their functions with examples. [62]
18. Demonstrate the function of **len()** method. [62]
19. How can you find the number of non-missing values for each column of a DF ? [62]
20. List all the methods that compute statistics. Demonstrate their use with examples. [63]
21. How does Pandas deal with the missing values while computing statistics? [64]
22. Demonstrate the use of **skipna** parameter with all the statistics computing methods. [65]
23. Demonstrate the use of **percentiles** parameter with **describe** method. [64]
24. What is method chaining in DF ? What are the pros and cons of it?
25. How can you count the number of missing values in a column ? [66]
26. How can you count the number of missing values in the entire DF? [66]
27. Determine if a column has any missing value. [66-67]
28. Determine if a DF has any missing value. [66-67]