TASK 1

1. Create 3 list viz. productId, Product Name, Product Price   with 5 elements each.

Add this element to create a DataFrame.

2. Extract one by one column and display separately from above dataframe.

3. Display separately each and every row from an above dataframe. (use loc or iloc function)

4. Display product name from 3 row using loc function.

5. Display price located in 2 row using iloc function.

6. Display 2nd to 4th row data excluding price.

7. Display 1 to 3rd row price data only.

8. Change marks in python column to 41 for students who have scored less than 40.

9. Add 2 marks to all the subjects marks. If any of the marks exceeds 100 change it to 100.

10. Display students who have scored more than 50 marks in python and more than 60 marks in data Science.

11. Display students records whose name starts with letter S.

12. Display students records whose name ends with letter a.

13. Calculate total and percentage for all the students.

14. Calculate Status (PASS / FAIL) for the Students.

15. Calculate percentage based grade value (per>=90 then A-grade, per>=80 then B-grade,

per>=70 then C-grade, per>=60 then D-grade, per>=50 then E-grade, per<50 then F grade)

16. Also calculate overall columns total, maximum, minimum and standard deviation for each

numeric columns

 Convert the above dataframe to excel, json and html.

17. Display meta-data for each column for the above dataframe.

18.Convert the above DataFrame to list within a dictionary.

19. Convert this dictionary again to a separate dataframe by adding 500 to each element in product price column.

Task 2

Using the SF Salaries Dataset from Kaggle! ,complete the tasks outlined in bold below

1. Import pandas as pd.

2. Read Salaries.csv as a dataframe called sal.

3. Check the head of the DataFrame.

4. Use the .info() method to find out how many entries there are.

5. What is the average BasePay ?

6. What is the highest amount of OvertimePay in the dataset ?

7. What is the job title of JOSEPH DRISCOLL ? Note: Use all caps, otherwise you may get an answer that doesn't match up (there is also a lowercase Joseph Driscoll).

8. How much does JOSEPH DRISCOLL make (including benefits)?

9. What is the name of highest paid person (including benefits)?

10. What is the name of lowest paid person (including benefits)? Do you notice something strange about how much he or she is paid?

11. What was the average (mean) BasePay of all employees per year? (2011-2014) ?

12. How many unique job titles are there?

13. What are the top 5 most common jobs?

14. How many Job Titles were represented by only one person in 2013? (e.g. Job Titles with only one occurence in 2013?)

15. How many people have the word Chief in their job title?

16. Is there a correlation between length of the Job Title string and Salary?