Pandas Programming

- https://raw.githubusercontent.com/mwaskom/seaborn-data/master/diamonds.csv

Download the dataset from the given link and apply the following operation on this dataset.

1. Write a Pandas program to read a CSV file from a specified source and print the first 10 rows.
2. Write a Pandas program to read a dataset from diamonds Data Frame and print the last 6 rows.
3. Write a Pandas program to select a series from diamonds Data Frame. Print the content of the series.
4. Write a Pandas program to find the number of rows and columns and the data type of each column of the diamonds Data frame.
5. Write a Pandas program to rename two of the columns of the diamonds Data frame.
6. Write a Pandas program to Sort the diamonds data based on length ascending and descending both.
7. Write a Pandas program to remove the second column of the diamonds Data frame.
8. Write a Pandas program to find the details of the diamonds where depth>61, price>340, and cut='Good'.
9. Write a Pandas program to calculate the count, the minimum, and maximum price for each cut of diamonds Data Frame.
10. Write Pandas program to Demonstrate handling of Missing values (Remove column, Remove rows and Filling values Etc.)
11. Write a program using pandas to display content of XML file. (Create any XML file of your choice)
12. Write a program to demonstrate the Groupby, Join and Merge.
13. Write a program to create Class Student and demonstrate the magic Function.
14. Write a program to demonstrate Bag of word model.

TF-IDF, NLP Programming

1. Write a Regular expression code to verify the email address.

   Example: abc@gmail.com
2. Write a program to read an HTML file using the beautiful soup library and parse the following information.
   a. To read all the hyperlinks
   b. To real head part
   c. To real table data

    d. After reading all the information shown in a proper format

3. Write NLP program using NLTK library to read text data from website and convert into appropriate feature table using Bag of words method.