1. Write a python program to read a paragraph with at least 4 sentences from the keyboard. Do the following operations

i) print the paragraph

ii) update the middle sentence by "UST Global specializes in Healthcare, Retail & Consumer Goods, Banking & Financial Services, Telecom, Media & Technology, Insurance, Transportation & Logistics and Manufacturing & Utilities."

iii) print the number of, vowels, uppercases, lowercases, special characters and repeating words

iv) remove all special characters in the paragraph and print the paragraph

v) swap the last and first sentences and print the paragraph

2. Write a program to read the name and marks of 10 students in 3 subjects in their final exam.

1. print a table with the inputs

2. Subject analysis: Print median and mean for each subjects. Print the names of top 3 students. Print table for each Subject in sorted order.

3. Student analysis: Print grades. [>90 is A+, >80 is A, >70 is B+, >60 is B, >50 is C and <50 is D.

3. Write a program to sort the given numbers by using merge sort algorithm

12,6,48,37,88,31,54,11,60,122, 105, 88, 122, 155, 105

Given any number in the list, print its position in the sorted list.

3 a) Make the function general purpose to read the list of numbers from keyboard

4. Need to divide a class of people in a family get together to participate in various sport activities.

A) Input their name and age [family has 20 members]

b) Print the names of people who will belong to children, youth, middle aged and senior groups. [Assume the age limit for each group]

5. The following data represents the actual liquid weight in 16 "twelve-ounce" cans.

11.95 11.91 11.86 11.94 12.00 11.93 12.00 11.94

12.10 11.95 11.99 11.94 11.89 12.01 11.99 11.94

a) Print a frequency distribution with this data.

b) Calculate summary statistics like mean, median, mode.