ASSIGNMENT -1

1)Mean: Average of all the data values.

Median : The exact middle value of sorted data, if there are 2 values we go for their average.

Mode: The most occurred data value is called the mode.

2) Standard Deviation : It is one more statistical term used to measure central tendency.

Variance : Also indicates same as Standard Deviation how the values are situated.

4) Find mean, median, mode and standard deviation for each data set.

A.) 7, 11, 16, 14, 11, 13, 19, 13, 13

B.) 16, 15, 16, 17, 19, 12, 14, 9

C.) 27, 66, 24, 81, 50, 40, 74, 81, 97

- A) MEAN = 117/9 =13

- MODE = 13

- MEDIAN = 13

- SORTED VALUES = [7,11,11,13, **13** ,13,14,16,19]

- B) MEAN = 118/8 =14.75

- MODE = 16

- MEDIAN = 15.5

- SORTED VALUES = [9,12,14, **15,16**, 16,17,19]

- C) MEAN = 535/9= 59.44

- MODE= 81

- MEDIAN= 66

- SORTED VALUES = [24,27, 40, **66** ,81,81,97]

ADDITIONAL

- STD. DEV:

- Sample data = [1,2,3,4,5]

- Mean= 3

- Std. Dev = Square root [[{(1-3)^2} + {(2-3)^2} + {(3-3)^2} + {(4-3)^2} + {(5-3)^2}]/5]

- = Square root [10/5]

- = Square root [2]

- Variance = Square [Square root [2]]

- = 2

SAMPLE MEAN

- Population(Total Employees) in a company = 2 lakhs

- No. of employees filled a survey on their monthly travelling expenses to & from to company = 25,000

- Sample Mean = (Total sum of expenses by all those 25K employees / 25,000)

Let Total sum of expenses by all those 25K employees = 7.5 Crores

 Then sample mean = (7.5 Crores /25,000)

$$= 3000$$