

Computer Applications I SUR 224



Benha University

Surveying Engineering Department

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Sheet 5

Problem 1: Mean, Median, Mode, and Range

Write a program to read an array and calculate the mean, median, and trend. Make sure that you use modular programming technique.

programming technique. Given $X = \{x_i, i \in [1, N]\}, x \in [0, 99]$, then: $mean(X) = \frac{1}{N} \sum_{i=1}^{N} x_i$. $median(X) = \begin{cases} x_{(N+1)/2} & , N \text{ is odd} \\ (x_{N/2} + x_{N/2+1})/2 & , N \text{ is even} \end{cases}$, X is sorted. mode(X) is the most frequent $x \in X$ range(X) = max(X) - min(X)