UNIVERSITY OF CAPE COAST

PROGRAMMING AND PROBLEM ANALYSIS

INDEX NUMBER: PS/ITC/19/0061

Assignment

Deduce an algorithm to find the following in the sets of integers.

1. Mean
2. Median
3. Mode
4. The smallest value in the set of integers.

Mean=Average

* Add up all the numbers in the data set.
* Divide the sum by the total number of values in the data set.

Median=the middle number

* Rearrange the set of numbers in ascending or descending order.
* Sort and check for the middle number in the set.
* When the two numbers appear to be the middle number, add them and divide by two.
* But if it odd then that’s the median.

Mode=How often one or two numbers appears in a set of numbers

* Rearrange the set of numbers from lowest to the highest.
* By sorting, check out for the number that appears the most or many times.
* Better still, count out how many times each number appears.
* The number that counts out the most is the modal number.

The smallest value in the set of integers

* Consider the first number of the data set as the smallest.
* Then compare the second number to the first number.
* If the second number appear not to be the smallest continue comparing until you get the smallest number.