CSE-3216

LAB-01

i) Find mean, median and mode from an array of numbers.

ii) Take a binary stream, divide it into k parts and find the checksum.

MEAN	**The sum of all the items, divided by the number of items in the set. Also called the average.**	2,4,3,6 **2 + 4 + 3 + 6 = 15** **15 ÷ 4 = 3.75** **Mean = 3.75**
MEDIAN	**The middle value when the data are in numerical order. If there are two numbers in the middle, find the mean (average) of those two numbers.**	2,4,3,6,8,5 **2,3,4,5,6,8** **4+5=9** **9÷2=4.5** **4.5 = median**
		2,4,3,6,8,5,7 **2,3,4,5,6,7,8** **5 = median**
MODE	**The value or values that occurs most often in a set of data.**	4,5,3,4,3,2,4,6 4 = mode

Checksum

- In checksum error detection scheme, the data is divided into k segments each of m bits.
- In the sender's end the segments are added using 1's complement arithmetic to get the sum. The sum is complemented to get the checksum.
- The checksum segment is sent along with the data segments.
- At the receiver's end, all received segments are added using 1's complement arithmetic to get the sum. The sum is complemented.
- If the result is zero, the received data is accepted; otherwise discarded.