

Write an MPASM assembly language program to compute the average of N 8-bit integer numbers (N is a power of two with  $N_{\max} = 256$ ) – That is, given N numbers, compute the sum of the N values and then compute the average.

Instructor will specify N and the values thereof.

The N numbers are placed in an array starting at some memory location (array EQU 0x0C). Accessing the integer values of the array is done using indirect addressing.

A loop is used to compute the sum of the N integers and the rotate operation is used to compute the average (i.e. N EQU 8).

The computed average value is displayed via 8 LEDs.

Example:

array EQU 0x0C  
N EQU 8

array →

10
20
30
40
50
60
70
80

APPROVED

sum = 360

average = 36

