COMPUTER ARCHITECTURES (02LSEOV)

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Problem solving session nº1
2016/2017

Note: the deadline for submitting this home work is 18th Nov 2016; details available on web portal

Prepare a program in Assembly for Intel 8086 that, given an array of integers of 10 elements (of 8 bits), is able to:

1. Compute the sum for each pair of consecutive values, putting the result in a 9 elements array ($B_j = A_j + A_{j+1}$).

2. Find the minimum value both for the first (A) and the second (B) array.

3. Compute all possible products among first 9 values of first array and all 9 values of second array, putting results in a matrix of 9x9 values (words).

4. Find the maximum value among values of the so computed matrix. Is there overflow?