COMPUTER ARCHITECTURES (02LSEOV)

Prof. Montuschi

Problem solving session n°1 2015/2016

Note: the deadline for submitting this home work is 13th Nov 2015; 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 $(B_i = A_i + A_{i+1})$.
- 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?