The Academic College of Tel-Aviv-Yaffo
121113 Computer Structure and the 8086 Assembly Language
Spring 2002

Home Assignment No. 1

Due date: May 5, 2002

1. You have an X (X and the array should be declared in your data segment) size Byte array as input. Sort the array in descending order. Print "Done !". You can use an inefficient method (like bubblesort).

2. Assume you have as an input an N size Byte array (just declare N and your array in your data segment). You have to check if the array is a polindrom [a polindrom is a mirror like array – i.e. (entry 1 equals entry N) AND (entry 2 equals entry N-1) and so on…)]. Print the check result, i.e. "The array is a polindrom" or "The array is not a polindrom".

3. Write a program that gets a decimal number from the user, and prints out the hexadecimal representation of the number.

4. Assume you have an N size Word array (just declare N and your array in the data segment). Check how many 16-symmetric values you have in your array. A 16-symmetric value is a number that the Word binary representation of it is mirror-like (for example, the number 9 is 4-symmetric because its representation is 1001, and 1001's binary-mirror-image is 1001).

Have fun,

Eliav.