Week 5

1. Determine the minimum and maximum values in a signed (positive and negative) integer array represented on BYTE. Write the minimum and maximum in the memory.
2. Solve exercise 1 using procedures (one procedure which computes the minimum value, other procedure which computes the maximum value).
3. Write a program that counts how many bits equal to 1 exist in a word value found in the memory. SHL or SHR instructions can be used followed by JC to check the value inside CF.
Example:
In 1580 there are 5 bits equal to 1.
4. Given an array of ASCII characters, create another 2 arrays. The first will contain the numbers in the initial array and the second will contain the small letters.
Example (initial arrays and the two result arrays):
sir = ’1’,’*’,’A’,’a’,’B’,’2’,’3’,’#’,’x’,’a’,’1’,’E’,’e’,’/’
sir1= ’1’,’2’,’3’,’1’
sir2= ’a’,’x’,’a’,’e’