Pop Quiz

FAST - National University of Computer & Emerging Sciences

Computer Organization & Assembly Language, Fall 2017

Student ID: *Section:*

T1: Write a program to display the binary equivalent of a given decimal number. Do not use any Irvine library procedures except those needed for display.

T2: Consider the following data declarations:

v1 BYTE 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
v2 WORD 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
v3 DWORD 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000
v4 DWORD 100,1200, 300, 400, 1500, 600,1700, 800, 900, 10000

Write a program to find the variable consuming the most memory without using ***sizeof***.

T3: Write a program to find the number of bits that are OFF in a given 16-bit value.

T4: Write a program which takes an array of 10 16-bit values and perform shuffle i.e. each time a program is executed, the elements in the array change their positions.

T5: **Finding Nemo**

Write a program to read characters from a keyboard until the last four characters read make up the word N E M O. If such a character stream is found than the program should output a message "Nemo found" and also display the number of characters that were read. Otherwise, the program should simply output "Nemo not found". *(Read* 25 characters at max)

Sample Output: *(Assuming character sequence C O A L N E M O were entered)*

Enter characters:

Nemo found...
Characters Read: 8