Lab

Lab Instructor: Abdul Qadeer Bilal

1. Use the following data definitions the questions given below:

data

myBytes BYTE 10h,20h,30h,40h myWords WORD 3 DUP(?),2000h myString BYTE "ABCDE"

(a) What will be the value of EAX after each of the following instructions execute?

mov eax, TYPE myBytes

mov eax,LENGTHOF myBytes

mov eax, SIZEOF myBytes

mov eax, TYPE myWords

mov eax,LENGTHOF myWords

mov eax, SIZEOF myWords

mov eax, SIZEOF myString

- (b) Write a single instruction that moves the first two bytes in myBytes to the DX register. The resulting value will be 2010h.
- (c) Write an instruction that moves the second byte in myWords to the AL register. (d) Write an instruction that moves all four bytes in myBytes to the EAX register.
- 2. Create an array of any size and give some values to it. Then display all the array with the help of loop instruction.
- 3. Create an array of any size and give some values to it. Then find the sum of all the elements of the array and display the sum.
- 4. Use a loop with indirect or indexed addressing to reverse the elements of an integer array in place. Do not copy the elements to any other array. Use the SIZEOF, TYPE, and LENGTHOF operators to make the program as flexible as possible.