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|  | NATIONAL UNIVERSITY  OF COMPUTER & EMERGING SCIENCES  PESHAWAR CAMPUS |  |

**Problem Set:** Assignment 01 **Semester :** Spring 2022

**Date Set :** March 09, 2022 **Due Date :** March.12,2022

**Course :** EE2003-COAL **Instructor :** Shakir

**Q1.** Consider the following data 5, 10, 8, 6, 11, 20. Use a loop to iterate over all the data and if the values are less than 12 then add the values in the variable named “less” else add the values in the variable named “greater”. You are required to write assembly language code for this. [Marks: 5]

**Q2.** Write a program to calculate the square of 20 by using a loop that adds 20 to the accumulator 20 times. [Marks: 5]

Note: You must use direct addressing.

**Q3.** 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. [Marks: 4]

**Q4.** Convert the following code in assembly language [Marks: 6]

a=0

b=200

c=30

while (a! =b)

{

if(a<100)

{

a=c+10

}

elseif (a==100)

{

break;

}

else

{

a+=10

}

}