

National University of Computer and Emerging Sciences



Lab Manual 05 **Computer Organization and Assembly Language Lab**

Course Instructor	Ms. Aleena Ahmed
Lab Instructor (s)	Mr. Raja Muzammil Muneer Ms. Nimra Abbas
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Department of Computer Science

FAST-NU, Lahore, Pakistan

Lab Manual 05

Task 1:

Write the sub-routine to calculate factorial. The sub-routine should take as parameter the number to calculate the factorial and returns factorial in AX register.

Task 2:

Write a subroutine multiply that receive two unsigned 8-bit integers and return product of them in back the 16-bit result. Doesn't use mul command write you own multiply code. Write a subroutine series that receive two arrays and size of array (assume both arrays are same size), then it compute , use your multiply subroutine to multiply then return 'S' to your main function. . (Assume your 'S' never exceed from 16 bits and is a local variable). Write the main program that pass two arrays and size to series subroutine then get the 'S' and save in CX. Do not use registers for passing arguments to the sub-routine. You may use a register for returning value from a sub-routine register.