MRK D12

Green University of Bangladesh

Department of Computer Science and Engineering

Lab Final Assessment, Fall 2023

Course Code: CSE 206

Course Title: Algorithm Lab

Total: 30 Time: 1 hr.

1. Write a program that takes a number from the user and prints the divisors of that number and then how many divisors there were. If the user gives 6, your program should print 1, 2, 3, 6, total 4 divisors. If the user gives 121, your program should print 1, 11, 121, total 3 divisors. 10

Sample input/output:
Input: Enter the number: 6
Output: the divisors are 1, 2, 3, 6 in total 4

2. Suppose, a, b and c are integer variables that have been assigned the values a = 7, b = 3 and C = 5. Determine the value of each of the following arithmetic expressions: 10

   1. a P (b Q c)
   2. (a P c) R b
   3. 2 P a Q 3 P b
   4. 2 P a Q (3 P b)

Where, P=*, Q=/, R=% .
Consider the last three digits of your id and modulus each digit by 3. If the modulus is 0 (Consider it as P), 1 (Consider it as Q), 2 (Consider it as R).
[Evaluate each expression in different procedures.]

3. Write a macro so that it takes in an integer array and its length. Find how many integers are greater than X and how many integers are less than or equal to X. 10
X is the last digit of your id.