


# National University of Computer and Emerging Sciences, Lahore Campus

	Course Name:	Programming Fundamentals	Course Code:	CS1002
	Program:	Electrical Engineering	Semester:	Fall 2023
	Duration:	15 minutes	Total Marks:	10
	Exam Date:	24 October 2023	Weight:	3.33
	Section:	EE-1A -2	Page(s):	2
	Exam Type:	Quiz-2 Solution	CLO #	2

Student Name: \_\_\_\_\_ Roll No. \_\_\_\_\_ Section: \_\_\_\_\_

Instruction/Notes: 1. Do not forget to write your Name and Roll Numbers.  
2. Solve on the paper and Return.

## Question No. 1

Marks: 10

Write a C++ program that inputs a positive integer from the user and displays the factors of that number. It also calculates and displays the sum of its factors.

### Sample Run:

Enter a positive integer: 60

Factors of 60 are: 1 2 3 4 5 6 10 12 15 20 30 60

Sum of factors of 60 is: 168

### Solution:

```
#include<iostream>
using namespace std;

int main()
{
    int n, i, sum=0;

    cout << "Enter a positive integer: ";
    cin >> n;

    cout << "Factors of " << n << " are: ";
    for(i = 1; i <= n; ++i)
    {
        if(n % i == 0)
        { cout << i << " ";
          sum=sum+i;}
    }

    cout<<"\nSum of factors of "<<n<<" is: "<<sum;
    return 0;
}
```