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:	30 November 2023	**Weight:**	3.33
	Section:	EE-1C -1	**Page(s):**	2
	Exam Type:	Quiz-3 Solution	**CLO #**	4

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**

What is the output of the following C++ code?

```cpp
const double PI = 3.14159;
double cylinderRadii[5] = {3.5, 7.2, 10.5, 9.8, 6.5};
double cylinderHeights[5] = {10.7, 6.5, 12.0, 10.5, 8.0};
double cylinderVolumes[5];

cout << fixed << showpoint << setprecision(2);

for (int i = 0; i < 5; i++)
        cylinderVolumes[i] = 2 * PI * cylinderRadii[i] * cylinderHeights[i];

for (int i = 0; i < 5; i++)
cout << (i + 1) << " " << cylinderRadii[i] << " "<< cylinderHeights[i] << " " << cylinderVolumes[i]
<< endl;
```

Solution

1 3.50 10.70 235.31

2 7.20 6.50 294.05

3 10.50 12.00 791.68

4 9.80 10.50 646.54

5 6.50 8.00 326.73