

National University of Computer and Emerging Sciences, Lahore Campus



Course: Operating System Lab
Program: BS(Computer Science)
Duration: 45 minutes
Quiz Date: 25-Oct-2018
Section: C
Exam: Quiz 1

Course Code: CL205
Semester: Fall 2018
Total Marks: 15
Weight: 5
Page(s): 1
Roll No:

Question # 1 (10)

There are exactly 3 threads generate string a, b and c in an arbitrary order. In an absence of any synchronization mechanism there will be no order in generation of a, b and c. In the form of regular expression the string $(a | b | c)^*$ { * means many times a character can occur, | means or, so different combinations can be aaaaaa... , bbbbbbbbbbb... , cccc... }. Synchronize threads using semaphore in such a way that your printed string will be $(cbbba)^*$ { * means many times cbbba can occur, so different combinations will be cbbba, cbbba , cbbba,... }.

Note you are not allowed to add or delete any cout statement

<pre>//thread 1 While(1) { Cout << 'a'; }</pre>	<pre>//thread 2 While(1) { Cout << 'b'; }</pre>	<pre>//thread 3 While(1) { Cout << 'c'; }</pre>
---	---	---