

CS 3733 Operating Systems — Fall 2002 Assignment 3

Name _____

Consecutively number the pages and fill in the index below. Put a check mark in the last column if you think the part is correct. Answer the questions from the assignment on the back of this sheet.

Description	log file page number	check if correct
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Part 1

- | | | |
|---------------------------------|-------|-------|
| 1. standard configuration | _____ | _____ |
| 2. after fork: child | _____ | _____ |
| 3. after fork: either | _____ | _____ |
| 4. after fork: random | _____ | _____ |
| 5. choose process: random | _____ | _____ |
| 6. choose process: random, RR 5 | _____ | _____ |
| 7. choose process: random, RR 2 | _____ | _____ |
| 8. print not atomic | _____ | _____ |
| 9. wait | _____ | _____ |
| 10. print not atomic and wait | _____ | _____ |

Part 2

- | | | |
|--------------------------|-------|-------|
| 1. default configuration | _____ | _____ |
| 2. after fork: child | _____ | _____ |
| 3. scheduling RR 2 | _____ | _____ |
| 4. scheduling RR 3 | _____ | _____ |

Part 3: Create a log file containing the program and the output.

- | | | |
|---------------|-------|-------|
| 1. ringtoken | _____ | _____ |
| 2. ringtoken1 | _____ | _____ |

Part 4: Create a log file containing the program and the output.

- | | | |
|------------------|-------|-------|
| 1. ringsemaphore | _____ | _____ |
|------------------|-------|-------|

If you think you did everything on the assignment correctly, check here: _____

Otherwise, give a brief description of what is working and what is not:

Answer the questions from the assignment here.

Part 1.

1. For which of the 10 experiments was the output in the same order each time it was run?

2. For which of the 10 experiments is the order of the output determined by the program?

3. For experiments 1, 8, 9 and 10 explain why you think the output was in the order that it was?

Part 2.

1. Is the tree structure the same in each case? How does it differ?

2. The process IDs are assigned in the order of creation. In each case describe the order of creation relative to the tree structure.

3. Is the order of the output affected by the scheduling of the processes?