

CS 3733 Operating Systems — Spring 2003 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. ringsemaphore	_____	_____
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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?

Part 3.

1. What determines the order in which the lines are output? Did you get a different order with different scheduling algorithms? What scheduling algorithms did you try?