**COSC609 – Assignment 4**

**INDIVIDUAL ASSIGNMENT**

**Due:** Monday, March 23

1. Using the following figure, perform **resource leveling**. Assume that each task can be performed independently of the other tasks.

Task 1 (2 workers)

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|  | Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  | Workers | 6 | 6 | 6 | 4 | 2 | 3 | 3 | 4 | 3 | 3 |

Task 2 (1 worker)

Task 3 (3 workers)

Task 4 (2 workers)

Task 5 (1 worker)

Task 6 (3 workers)

(Use the following blank table to assist in answering.)

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| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Workers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Task 1

Task 2

Task 3

Task 4

Task 5

Task 6

1. Using the same figure as in #1, perform **resource-limited scheduling**. Assume that you have only three workers available at any given time. Use slack to determine priority (as per the example in the text in Chapter 6)

(Use the following blank table to assist in answering.) Task 1

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| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Workers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Task 2

Task 3

Task 4

Task 5

Task 6