**CSCE 4013/5013 Cloud Computing and Security**

**Quiz #6 (20 points)**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Problem #1 (10 pts)**

1. Yes / No Do you participate in this quiz?

**Problem #2 (10 pts)**

1. (5 points) Following are the contents of two files.

|  |  |
| --- | --- |
| File 0 | File 1 |
| A B A B C A D  A C B C B A E | B C B A C D  A D B A D C |

Please list the inverted indices of the five terms. Each posting list is in such a format as “file name:# of occurrence;file name:# of occurrence...”. The posting list needs to be in the order of file names.

|  |  |
| --- | --- |
| **Term** | **Postings** |
| A | File 0: 5; File 1: 3 |
| B | File 0: 4; File 1: 3 |
| C | File 0: 3; File 1: 3 |
| D | File 0: 1; File 1: 3 |
| E | File 0: 1 |

1. (5 points) Following is a graph with the given link weights. Dijkstra’s algorithm is applied to find the single source shortest path.



n0 is the source node. List the costs to reach all nodes from n0 when n4 is the “current node” but the costs of its neighbor nodes have not been updated.

|  |  |
| --- | --- |
| Node | Cost |
| n0 | 0 |
| n1 | 9 |
| n2 | 5 |
| n3 | 11 |
| n4 | 7 |