## Cosc 4740 <br> Written Q16

Worth 20 points
All answers are to be typed. This is NOT a programming assignment, no compiler needed, which also means it is due at class time.
you must write out all the work to get full points. Answers of just yes and/or no, will receive zero points

Bankers algorithm

|  | Allocation | Max | Available |
| :---: | :---: | :---: | :---: |
|  | A B C D | A B C D | A B C D |
| P0 | 0012 | 0012 | 1520 |
| P1 | 1000 | 1750 |  |
| P2 | 1354 | 2356 |  |
| P3 | 0632 | 0652 |  |
| P4 | 0014 | 0656 |  |

A. What is the content of the Matrix Need?
B. Is the system in a safe state?
C. If a request from P1 arrives for $(0,4,2,0)$, can the request be granted immediately?

