

**COP 3503 Spring 2024 Program #4 Grading Criteria (100 points total)**

1. Sets up appropriate constants. (Doesn't have to be the same as mine, but there should be some constants that get used to help readability.) – 3 pts
2. Reads in board data in an appropriate way. (There are many ways to do this.) – 2 pts
3. Calculates bitmask for the initial position. – 5 pts
4. Calculates bitmask for the final position. – 5 pts
5. Has a function that given a bitmask for a current position, calculates the set of bitmasks that could be the next position. – 10 pts
6. Has a BFS with a queue. – 5 pts
7. Has a distance array and not a distance map. – 3 pts
8. Has appropriate helper methods. – 5 pts
9. Follows specification for output. – 2 pts
10. Header Comment, Comments, Use of White space, Good consistent coding style. – 10 pts
11. 25 test cases – 2 pts each

**Run Time Limit = 3X, where X is the run time of my solution on your (TAs) computer. Stop output at the end of the time limit and just grade those cases. You can be approximate with this.**

**If program doesn't compile, max grade of 45 out of 100 → can get most pts from items 1 – 10, above, but 5 pts for not compiling are taken off.**