

Eight Queens – (Computer Science)

Create code which will solve and print a solution to the Eight Queens problem.

- You may not use or print a known “trick” or solution.
- You may not copy part or all of any code you find online. **This is academic dishonesty.**
- If asked, you must be able to explain every line of code to me.
- You should avoid any kind of recursion in your solution.
- Yes, you must use functions.

___ / 20 pts – Working in class (not talking, playing games, on phone)

-2 for each occasion not working on your project

___ / 20 pts – One page explanation detailing how you solved the problem.

___ / 4 - proper spelling and grammar, no ‘jokes’ or ‘fluff’
 ___ / 8 - describes how the program was solved

DESCRIBE IN WORDS, NOT CODE

Yes: *The algorithm searches for a match vertically*

No: *I made a for loop from 0 to 7*

___ / 4 - description matches submitted program
 ___ / 4 - paper is proper font, spacing, formatting, etc...

___ / 20 pts – Program follows style requirements

___ / 2	Bullet point #1	Program header
___ / 2	Bullet point #2	Function headers
___ / 2	Bullet point #3	White space
___ / 2	Bullet point #4	Line length
___ / 2	Bullet point #5	Meaningful variable names
___ / 2	Bullet point #6	Proper capitalization of names
___ / 2	Bullet point #7	Well-chosen variable scopes
___ / 4	Bullet point #8	Unnecessary code
___ / 2	Bullet point #9	Output matches requirements

___ / 40 pts – How the program works

24 / 40	Program does not work, stuck in an infinite loop, etc...
30 / 40	Program can find a partial solution, or works but not always
36 / 40	Program can only find the same solution on repeated runs
40 / 40	Program can always find different solutions on repeated runs

___ / 100 pts - total overall grade -- Due: Wednesday, January 8th, 2019 EOC – **NO EXCEPTIONS!**

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0 1 2 3 4 5 6 7
0 * Q * * * * *
1 * * * * Q * *
2 * * * * * Q *
3 * * * Q * * *
4 Q * * * * *
5 * * * * * Q
6 * * * * Q *
7 * * Q * * *

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