

Assessment Brief for Programming in C

Search/Sort: N-Queens

Unit name	Programming in C
Unit code	COMSM1201
Assessment number	3 (2 nd fully marked assessment)
Assessment name	N-Queens (Search/Sort)
Assessment prepared by	Neill Campbell
Assessment type	Coursework
Credit value	20% of 30cp unit
Expected time to complete	Around 1 week, very approximately.
Submission format	Via Blackboard – one 8q.zip file. You can submit as often as you like, old files are automatically overwritten. I'll only mark your latest submission. Any submissions that are late (even by 1 second) are automatically given a late penalty; my feedback will not show this. Penalties are enforced by our systems not me!
Deadline	17 th Movember 2023 (Friday afternoon, Week 8 @ 13:00)
Deliverable	Only one file : <ol style="list-style-type: none"> 1) A single file entitled <i>8q.zip</i>. Inside the .zip file, give me <i>Makefile</i> & <i>8q.c</i> (and optionally <i>extension.c</i> and <i>extension.txt</i>). 2) Make sure these are spelled correctly and have been compiled in a terminal on a lab machine without warnings using the full set of warning flags.
Learning outcomes being assessed	<ul style="list-style-type: none"> • To be able to write a program, given a brief specification that compiles and executes correctly. • To be able to convert a simple algorithm into working code. • The ability to program in the C99 C standard, and in the style outlined in the house-style guidelines. • How to utilise, amongst others: 2D arrays, structures and pointers. • To be able to build a program from a suite of small, well tested functions. • To be able to debug simple programs on your own.
Assessment criteria	Conformance to the house-style guidelines, assert testing, short readable functions.
Additional resources	"Live" Q&A sessions, week 5/7 exercises.
Support for this assignment	6 hours of labs in week 8.
Additional advice to students	Use house-style guidelines. DO NOT wait until the end to do testing – it will be obvious and have had no impact on the style of the program. Write simple functions first (e.g. check if a square is in 'check'). If your code doesn't work, put a comment explaining this at the top, and submit it anyway – your style/structure is still worth marks.
Feedback mode/method	Brief written feedback from Neill, and, additionally, at any time verbally during lab sessions.
Planned feedback date	Maybe as early as Wednesday week 11.
Useful previous feedback	Minesweeper
Future feedback use	Next assignment