

Assessment Brief for Programming in C

ADTs: 27-Way Trees

Unit name	Programming in C
Unit code	COMSM1201
Assessment number	5
Assessment name	ADTs : T27
Assessment prepared by	Neill Campbell
Assessment type	Coursework
Credit value	25% of 30cp unit
Expected time to complete	Around 1 week, very approximately.
Submission format	Via Blackboard – one .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	29 th Movember (Friday afternoon, Week 11 @ 13:00)
Deliverable	Only one file : <ol style="list-style-type: none"> 1) A single file entitled <i>t27.zip</i>. Inside the .zip file, give me (at least) <i>t27.c</i>. If you do an extension, put these in the zip too, but in a subfolder named <i>Extension</i>. These will include your own Makefile, source code and <i>extension.txt</i>. Ensure this extension can still compile and execute the basic functions in my <i>driver.c</i>. 2) Make sure these filenames are spelled correctly and have been compiled in a terminal on a lab machine without warnings using the full set of warning flags/my <i>Makefile</i>.
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 understand ADT interfaces and how to compile against a given interface & driver file. • To be able to perform additional checking using the sanitizer. • 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 9 (ADTs) / 10 (Trees) exercises.
Support for this assignment	6 hours of labs in week 11.
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. If your code doesn't work, also submit a README.txt file, 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	ASAP after Christmas.
Useful previous feedback	MatchDrop
Future feedback use	-