

# Lab 9

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## Objectives

- Introduction to compound data using C structured data types.

## During your registered lab time...

1. Download the provided file called `lab9.c` to your computer.  
To copy this file to JupyterHub, create a file named `lab9.c` in JupyterHub, then navigate to the folder with the downloaded file and click and drag this downloaded file to the open window in Jupyter Hub.
2. Your Lab TA will let you know during lab time which exercises will be graded and will check the work in the lab – the work must be completed within the lab to receive marks.

NOTE: grading may consider both correctness and quality of your code.

NOTE: Where examples are provided for clarity in the problem descriptions, they do not necessarily consider all edge cases – your testing should consider all edge cases.

## Exercises

For all function designs, you must have:

- a function prototype above `main`
- a function definition after `main`
- documentation above the function definition
- calls to test the function in `main`

The specification for the exercises for this lab can be found in the provided `lab9.c` file marked with `//TODO` tags. This lab contains the following 2 parts:

PART 1 – define your own new type.

NOTE: the code given will not compile until this part is complete.

PART 2 – Design functions that make use of your new type, which contains 10 `//TODO` exercises

NOTE: the code given will generate warning until you have completed the functions that return values.