01 - Basics. Here's the things we covered:

- Basic makefile generation
- Directory setup
- Basic data types
- POD (plain old data) vs. non-POD types
- Printing to the terminal using `std::cout`
- Structs
- Constructors
- Functions
- Return types
- Constructors
- Overloading functions
- Overloading constructors
- Type aliases
- Member variables
- Member functions
- Member type aliases

Homework. We commonly solve the Navier-Stokes equations in primitive variables:

$$\mathbf{q} = \begin{pmatrix} P & T & u & v & w \end{pmatrix}^T.$$

1. Write a structure that represents one instance of these state variables, i.e. a structure with member variables to represent each of these values.
2. Ensure that your implementation of this structure can use single or double precision.
3. Write two constructors for your structure, one that takes all values and assigns them, and another that takes one value and assigns it to all.
4. Write a function to print your structure to the terminal using `std::cout`, either as a free function or a member function.