

Tuples Exercises

std::tuple

- What are the main differences between std::pair and std::tuple

Accessing tuple members

- Write down code that defines an `std::tuple` object using
 - Constructor call
 - `make_tuple()`
- Write a program that
 - Prints out the first element of your tuple
 - Modifies an element in your tuple
 - Prints out the value of an element with a given type

Unpacking a tuple

- What is the purpose of `std::tie`?
- Write a program that uses `std::tie` with your tuple

Returning multiple values

- Why are tuples useful for returning multiple values from functions?
- Write a simple program with a function that returns a tuple