

# Optional Type Exercises

# std::optional

- Briefly describe std::optional

# Accessing data in `std::optional`

- Write a simple program which
  - Creates an empty `std::optional` object
  - Stores some data in the object
  - Displays the value of the data

# Optional Return Value with `std::optional`

- Alter the `str2int()` function so that it now returns `std::optional`
- Make the necessary changes to `main()`
- Check that your program compiles and runs correctly
- Make sure that errors are handled correctly
- Use both forms of syntax for checking and accessing an `std::optional` object

# Applications of `std::optional`

- Describe some situations where `std::optional` could be useful

# Disadvantages of `std::optional`

- Give some disadvantages of `std::optional`