

Populator Algorithms

Exercises

fill()

- What does fill() do?
- What arguments does fill() take?
- Convert the sample code into a full working program
- Write the equivalent code without using fill()

fill_n()

- What does fill_n() do?
- What arguments does fill_n() take?
- Convert the sample code into a full working program
- Write the equivalent code without using fill_n()

- What problems can occur when using fill_n with an uninitialized container?
- Write a program which executes the sample code and run it. What happens?

Non-algorithmic Version

- Write an equivalent of `fill_n()` which uses a loop and does not write past the end of the container
- How does this avoid the problem of writing to non-existent elements?

Introduction to back_inserter()

- Explain what back_inserter() does
- How does back_inserter() solve the problem from the last slide?
- Rewrite your program from the previous slide to use back_inserter() and run it. What happens?

`generate()`

- What does `generate()` do?

generate() example

- What arguments does generate() take?
- Convert the sample code into a full working program
- Write the equivalent code without using generate()

generate_n()

- What does generate_n() do?
- What arguments does generate_n() take?
- Convert the sample code into a full working program
- Write the equivalent code without using generate_n()