

Inline Variables Exercises

One Definition Rule (ODR)

- What is meant by the One Definition Rule?

Inline Functions

- Give three ways in which a function can be defined in multiple source files without breaking the One Definition Rule

Inline Functions and Optimization

- "Declaring a function inline always makes the program faster, because it removes the overhead of the function call"
- Is this statement correct?

Extern Variables

- Write a program with a header file and two source files
 - The header file defines a global variable which is "extern"
 - The two source files include this header file
 - One source file initializes the global variable
 - The other source file has a main function which prints out the global variable's value

Drawbacks of Extern Variables

- Apart from the usual disadvantages of global variables, are there any drawbacks to making a variable extern?

C++17 Inline Variables

- Write a similar program to your earlier solution, but using C++17 inline variables instead of extern
- What are the advantages of inline variables?