# Filesystem File Operations Solutions

# Filesystem File Operations

- Write a program that displays the number of bytes in a file

- In what circumstances can this operation fail?
  - The file does not exist
  - The file is not accessible
  - The file exists, but is not a regular file

- What happens if the operation fails?
  - An std::filesystem::filesystem_error exception is thrown

# Exception Handling

- Rewrite your solution from the previous exercise to handle exceptions
- Test your program works correctly

# Error Codes

- Briefly describe how error codes can be used instead of exceptions when working with std::filesystem's file operations

  - Most of the operations on path are overloaded
  - The overload has an extra argument of type std::error_code
  - This argument can be checked to see if an operation succeeded
  - If the operation failed, the error_code will give some information about the reason for the failure

- Rewrite your solution from the previous exercise to use error codes

- Test your program works correctly

# Removing Files

- Briefly describe the remove function in std::filename
  - remove() takes a path as argument
  - It can delete a file or an empty directory