

The Path Class Solutions

Path Interface

- Write a program which creates an `std::filesystem::path` object and prints out
 - The root's name and path
 - The relative path and parent path
 - The file's name, stem and extension

Path Iteration

- Write a program which iterates over all the elements in your path object from the previous exercise

Path Composition

- `std::filesystem::path` has `concat()` and `append()` operators
- What is the difference between these two operators?
 - `concat()` adds its argument to the path
 - `append()` adds a directory separator before adding the argument
- Write a program which builds up a path object, using `concat()` and `append()`
 - You may also use the alternative compound operators

Filename Modification

- Write a program which creates a path object for a file and
 - Changes the directory separator to the operating system's preferred separator
 - Changes the filename's extension
 - Changes the filename's name
- What effect do these operations have on the file on disk?
 - These operations have no effect on the file
 - To change the file on disk, call `rename()`
- Modify your program so that the disk file's name matches the path object