Lb_2.5

1.0

Generated by Doxygen 1.12.0

Chapter 1

File Index

1.1 File List

Here is a list of all documented files with brief descriptions:

Chapter 2

File Documentation

2.1 main.cpp File Reference

Main file of the program for processing an array of numbers from a file.

```
#include <iostream>
#include <fstream>
#include <vector>
#include <string>
#include "operations.h"
```

Functions

- void **print_help** ()

  Displays the usage information of the program.
- int main (int argc, char ∗argv[ ])

  Main function of the program.

2.1.1 Detailed Description

Main file of the program for processing an array of numbers from a file.

This file contains the code for reading an array of numbers from an input file, performing the specified operation (sorting, reversing, or swapping even and odd elements), and writing the result to an output file.

2.1.2 Function Documentation

2.1.2.1 main()

```
int main (
            int argc,
            char * argv[ ])
```

Main function of the program.

Parameters

argc	Number of command line arguments.
argv	Array of command line arguments.

Returns

int Exit code of the program.

2.2 operations.cpp File Reference

Implementation of functions for operations on an array of numbers.

```
#include "operations.h"
#include <algorithm>
```

Functions

- void sort (vector< int > &data)

  Sorts an array of numbers in ascending order.
- void reverse (vector< int > &data)

  Reverses an array of numbers.
- void swap_even_odd (vector< int > &data)

  Swaps even and odd elements in the array.

2.2.1 Detailed Description

Implementation of functions for operations on an array of numbers.

This file contains the implementation of functions for sorting, reversing, and swapping elements in an array.

2.2.2 Function Documentation

2.2.2.1 reverse()

```
void reverse (
            vector< int > & data)
```

Reverses an array of numbers.

Parameters

data	Vector of integers to be reversed.

2.2.2.2 sort()

```
void sort (
            vector< int > & data)
```

Sorts an array of numbers in ascending order.

Parameters

data	Vector of integers to be sorted.

2.2.2.3 swap_even_odd()

```
void swap_even_odd (
            vector< int > & data)
```

Swaps even and odd elements in the array.

Parameters

data	Vector of integers for swapping.

2.3 operations.h File Reference

Header file defining functions for operations on an array of numbers.

```
#include <vector>
```

Functions

- void sort (vector< int > &data)

  Sorts an array of numbers in ascending order.
- void reverse (vector< int > &data)

  Reverses an array of numbers.
- void swap_even_odd (vector< int > &data)

  Swaps even and odd elements in the array.

2.3.1 Detailed Description

Header file defining functions for operations on an array of numbers.

This file contains function declarations for sorting, reversing, and swapping elements in an array.

2.3.2 Function Documentation

2.3.2.1 reverse()

```
void reverse (
            vector< int > & data)
```

Reverses an array of numbers.

Parameters

data	Vector of integers to be reversed.

2.3.2.2 sort()

```
void sort (
            vector< int > & data)
```

Sorts an array of numbers in ascending order.

Parameters

data	Vector of integers to be sorted.

2.3.2.3 swap_even_odd()

```
void swap_even_odd (
            vector< int > & data)
```

Swaps even and odd elements in the array.

Parameters

data	Vector of integers for swapping.

2.4 operations.h

Go to the documentation of this file.

```
00001
00008 #ifndef OPERATIONS_H
00009 #define OPERATIONS_H
00010
00011 #include <vector>
00012
00013 using namespace std;
00014
00020 extern "C" void sort(vector<int>& data);
00021
00027 extern "C" void reverse(vector<int>& data);
00028
00034 extern "C" void swap_even_odd(vector<int>& data);
00035
00036 #endif // OPERATIONS_H
```