

C++ Control Flow

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Contents

1	The Build Process	2
1.1	The Preprocessor	2
1.1.1	Text Replacement <code>#define</code>	2
1.1.2	Conditional Compilation <code>#if</code> , <code>#ifdef</code>	2
1.1.3	File Inclusion <code>#include</code>	2
1.2	The Compiler	2
1.2.1	Compilation Errors	2
1.3	The Linker	2
1.3.1	Linker Errors	2
2	Memory and Pointers	2
2.1	Introduction to Memory	2
2.2	Pointers	2
2.2.1	NULL Pointers	2
2.2.2	Pointer Arithmetic	2
2.2.3	Pointers to Pointers	2
2.3	References	2
3	Memory Segments	2
3.1	Text Segment	2
3.2	Static Memory	2
3.2.1	<code>static</code> Keyword	2
3.2.2	Initialized vs. Uninitialized Static Data	2
3.3	Heap Segment	2
3.3.1	Operators <code>new</code> and <code>delete</code>	2
3.3.2	Memory Leaks	2
3.4	Stack Segment	2
3.4.1	Stack Pointer	2

1 The Build Process

1.1 The Preprocessor

1.1.1 Text Replacement `#define`

1.1.2 Conditional Compilation `#if`, `#ifdef`

1.1.3 File Inclusion `#include`

1.2 The Compiler

1.2.1 Compilation Errors

1.3 The Linker

1.3.1 Linker Errors

2 Memory and Pointers

2.1 Introduction to Memory

2.2 Pointers

2.2.1 NULL Pointers

2.2.2 Pointer Arithmetic

2.2.3 Pointers to Pointers

2.3 References

3 Memory Segments

3.1 Text Segment

3.2 Static Memory

3.2.1 `static` Keyword

3.2.2 Initialized vs. Uninitialized Static Data

3.3 Heap Segment

3.3.1 Operators `new` and `delete`

3.3.2 Memory Leaks

3.4 Stack Segment

3.4.1 Stack Pointer