

Chapter 1:

Compiler: A program that translates a computer program written in one language into an equivalent program in another language (often from high-level language to machine language).

Java Class Libraries: The collection of preexisting Java code that provides solutions to common programming problems

Binary to decimal:

Convert 1011010110 to decimal.

2^{16}	2^{15}	2^{14}	2^{13}	2^{12}	2^{11}	2^{10}	2^9	2^8	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
65536	32768	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1
							1	0	1	1	0	1	0	1	1	0

$2 + 4 + 16 + 64 + 128 + 512 = 726$

$0b1011010110 = 726$

Decimal to binary:

Convert 867 to binary.

2^{11}	2^{10}	2^9	2^8	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
2048	1024	512	256	128	64	32	16	8	4	2	1
		$867 - 512 = 355$	$355 - 256 = 99$		$99 - 64 = 35$	$35 - 32 = 3$				$3 - 2 = 1$	$1 - 1 = 0$
		1	1	0	1	1	0	0	0	1	1

$867 = 0b1101100011$

Escape Sequences:

<code>\t</code>	tab
<code>\n</code>	new line
<code>\"</code>	quotation
<code>\\</code>	backslash

Class naming convention: start with a capital letter. When you are putting several words together capitalize the first letter of each word.

Method naming convention: start with a lowercase letter. When you are putting several words together capitalize the first letter of each word after the first.

Compile-Time Errors: Errors that occur when you violate the rules of writing syntax are known as Compile-Time errors. This compiler error indicates something that must be fixed before the code can be compiled.

Run-Time Errors: Errors which occur during program execution(run-time) after successful compilation are called run-time errors. One of the most common run-time errors is division by zero.