C++ Reference Manual

A Comprehensive Guide

Your Name

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Table of Contents

Language

This is a reference of the core C++ language constructs.

ASCII chart

dec	hex	ch	dec	hex	ch	dec	hex	ch
0	00	NUL (null)	32	20	(space)	64	40	@
96	60	`	1	01	SOH (start of header)	33	21	!
65	A	97	61	a	2	02	STX (start of text)	34
22	“	66	42	B	98	62	b	3
03	ETX (end of text)	35	23	#	67	43	C	99
63	c	4	04	EOT (end of transmission)	36	44	24	$
68	44	D	100	64	d	5	05	ENQ (enquiry)
37	25	%	69	45	E	101	65	e
6	06	ACK (acknowledge)	38	26	&	70	46	F
102	66	f	7	07	BEL (bell)	39	27	‘
71	47	G	103	67	g	8	08	BS (backspace)
40	28	(	72	48	H	104	68	h
9	09	HT (horizontal tab)	41	29	)	73	49	I
105	69	i	10	0a	LF (line feed - new line)	42	2a	*

dec	hex	ch	dec	hex	ch	dec	hex	ch
74	4a	J	106	6a	j	11	0b	VT (vertical tab)
43	2b	+	75	4b	K	107	6b	k
12	0c	FF (form feed - new page)	44	2c	,	76	4c	L
108	6c	l	13	0d	CR (carriage return)	45	2d	-
77	4d	M	109	6d	m	14	0e	SO (shift out)
46	2e	.	78	4e	N	110	6e	n
15	0f	SI (shift in)	47	2f	/	79	4f	O
111	6f	o	16	10	DLE (data link escape)	48	30	
80	50	P	112	70	p	17	11	DC1 (device control 1)
49	31		81	51	Q	113	71	q
18	12	DC2 (device control 2)	50	32		82	52	R
114	72	r	19	13	DC3 (device control 3)	51	33	
83	53	S	115	73	s	20	14	DC4 (device control 4)
52	34		84	54	T	116	74	t

dec	hex	ch	dec	hex	ch	dec	hex	ch
21	15	NAK (negative acknowl-edge)	53	35		85	55	U
117	75	u	22	16	SYN (synchro-nous idle)	54	36	
86	56	V	118	76	v	23	17	ETB (end of trans-mission block)
55	37		87	57	W	119	77	w
24	18	CAN (cancel)	56	38		88	58	X
120	78	x	25	19	EM (end of medium)	57	39	
89	59	Y	121	79	y	26	1a	SUB (sub-stitute)
58	3a	:	90	5a	Z	122	7a	z
27	1b	ESC (escape)	59	3b	;	91	5b	[
123	7b	{	28	1c	FS (file separa-tor)	60	3c	<
92	5c	\	124	7c	|	29	1d	GS (group separa-tor)
61	3d	=	93	5d	]	125	7d	}
30	1e	RS (record separa-tor)	62	3e	>	94	5e	^

dec	hex	ch	dec	hex	ch	dec	hex	ch
126	7e		31	1f	US (unit separator)	63	3f	?
95	5f	_	127	7f	DEL (delete)			

Basic concepts

Keywords

Expressions

Declarations

Initialization

Functions

Statements

Classes

Templates

Exceptions

Basic Concepts

Here's a basic example of C++ code:

```
int main() {
    std::cout << "Hello, World!" << std::endl;
    return 0;
}
```

Data Types

Fundamental Types

C++ provides several fundamental data types...

```
int number = 42;
double pi = 3.14159;
bool flag = true;
char letter = 'A';
```

Appendix A: Vocabulary

Common Terms

- **Pointer**: A variable that stores the memory address…
- **Reference**: An alias for an existing variable…
- **Constructor**: A special member function…

Index