

## Using tables and appendices information as a C++ syntax reference or tool for future code development

**Table 2-1 Special Characters**

Character	Name	Description
//	Double slash	Marks the beginning of a comment,
#	Pound sign or hash symbol	Marks the beginning of a preprocessor directive.
< >	Opening and closing brackets	Encloses a filename when used with the <b>#include</b> directive.
( )	Opening and closing parentheses	Used in naming a function, as in <b>int main()</b>
{ }	Opening and closing braces	Encloses a group of statements, such as the contents of a function.
" "	Opening and closing quotation marks	Encloses a string of characters, such as a message that is to be printed on the screen.
;	Semicolon	Marks the end of a complete programming statement.

**Table 2-2 Common Escape Sequences**

Escape Sequence	Name	Description
\n	Newline	Causes the cursor to go to the next line for subsequent printing.
\t	Horizontal tab	Causes the cursor to skip over to the next tab stop.
\a	Alarm	Causes the computer to beep.
\b	Backspace	Causes the cursor to back up, or move left one position.
\r	Return	Causes the cursor to go to the beginning of the current line, not the next line.
\\	Backslash	Causes a backslash to be printed.
\'	Single quote	Causes a single quotation mark to be printed.
\"	Double quote	Causes a double quotation mark to be printed.

**Table 2-4 The C++ Key Words**

and	continue	goto	public	try
and_eq	default	if	register	typedef
asm	delete	inline	reinterpret_cast	typeid
auto	do	int	return	typename
bitand	double	long	short	union
bitor	dynamic_cast	mutable	signed	unsigned
bool	else	namespace	sizeof	using
break	enum	new	static	virtual
case	explicit	not	static_cast	void
catch	export	not_eq	struct	volatile
char	extern	operator	switch	wchar_t
class	false	or	template	while
compl	float	or_eq	this	xor
const	for	private	throw	xor_eq
const_cast	friend	protected	true	

**Table 2-6 Integer Data Types, Sizes, and Ranges**

Data Type	Size	Range
<b>short</b>	2 bytes	-32,768 to +32,767
unsigned short	2 bytes	0 to +65,535
<b>int</b>	4 bytes	-2,147,483,648 to +2,147,483,647
unsigned int	4 bytes	0 to 4,294,967,295
<b>long</b>	4 bytes	-2,147,483,648 to +2,147,483,647
unsigned long	4 bytes	0 to 4,294,967,295

**Table 2-8 Floating Point Data Types on PCs**

Data Type	Key Word	Description
Single precision	float	4 bytes. Numbers between $\pm 3.4\text{E}-38$ and $\pm 3.4\text{E}38$
Double precision	double	8 bytes. Numbers between $\pm 1.7\text{E}-308$ and $\pm 1.7\text{E}308$
Long double precision	long double*	8 bytes. Numbers between $\pm 1.7\text{E}-308$ and $\pm 1.7\text{E}308$

\*Some compilers use more than 8 bytes for long doubles. These allow greater ranges