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

**Table 2-1 Special Characters**

Character Narne Description

*I I* Double slash

• Pound sign

< > Opening and closing brackets

( ) Opening and closing parentheses

Opening and closing braces

Marks the beginning of a comment,

Marks the beginning of a preprocessor directive. Encloses a filename when used with the #include directive.

Used in naming a function, as in int main() 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

\a Alarm

\b Backspace

\r Return

\\ Backslash

Causes the cursor to skip ove.r to the next tab stop. Causes the computer to beep.

Causes the cursor to back up, or move left one position.

Causes the cursor to go to the beginning of the current line, not the next line.

Causes a backslash to be printed.

,\'..

**Table 2-4**

Single quote Causes a single quotation mark to be printed. Double quote Causes a··double quotation rna rk to be printed.

**The C++ Key Words**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| and and\_eq asm auto bitand bitor | continue default delete  do double dynamic\_cast | goto  if  in line int long  mutable | public  register reinte.rpret\_cast return  short signed | try typedef typeid typename union 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

short 2 bytes -32,768 to +32,767 unsigned short 2 bytes 0 to +65,535

int 4 bytes -2,147,483,648 to +2,147,483,647 unsigned int 4 bytes 0 to 4,294,967,295

long 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 ±3.4E-38 and ±3.4E38

Double precision ·

double 8 bytes. Numbers between ±:1.7E-308 and :!:1.7E308

Long double precision long double\* 8 bytes. Numbers between ±1.7E-308 and ±:1.7E308

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