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BSCPE-1B

1.What is #include<iostream>?

***iostream*** is the header file which contains all the functions of program like ***cout, cin etc.*** and ***#include*** tells the preprocessor to include these header file in the program.

include <iostream.h>   
#include is known as a ***preprocessor directive***, which is used to load files…

<> indicate the start and end of file name to be loaded you can use " " quotes too instead of <>   
<> are for header files (files with extension .h)   
"" for c files (files with extension .c)

The file iostream.h is located in your include path. the include path indicates the directories on your computer in which to search for a file, if the file is not located in the current directory.

2.The source code of “iostream”.

#include <iostream>

Lines beginning with a hash sign (#) are directives for the preprocessor. They are not regular code lines with expressions but indications for the compiler’s preprocessor. In this case the directive #include <iostream> tells the preprocessor to include the io stream standard file. This specific file (iostream) includes the declarations of the basic standard input-output library in C++, and it is included because its functionality is going to be used later in the program.

Lines beginning with a hash sign (#) are directives read and interpreted by what is known as the preprocessor. They are special lines interpreted before the compilation of the program itself begins. In this case, the directive #include <iostream>, instructs the preprocessor to include a section of standard C++ code, known as header iostream, that allows to perform standard input and output operations, such as writing the output of this program (Hello World) to the screen.

00001 // Standard iostream objects -\*- C++ -\*-

00002

00003 // Copyright (C) 1997, 1998, 1999, 2001, 2002 Free Software Foundation, Inc.

00004 //

00005 // This file is part of the GNU ISO C++ Library. This library is free

00006 // software; you can redistribute it and/or modify it under the

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00010

00011 // This library is distributed in the hope that it will be useful,

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00018 // Software Foundation, 59 Temple Place - Suite 330, Boston, MA 02111-1307,

00019 // USA.

00020

00021 // As a special exception, you may use this file as part of a free software

00022 // library without restriction. Specifically, if other files instantiate

00023 // templates or use macros or inline functions from this file, or you compile

00024 // this file and link it with other files to produce an executable, this

00025 // file does not by itself cause the resulting executable to be covered by

00026 // the GNU General Public License. This exception does not however

00027 // invalidate any other reasons why the executable file might be covered by

00028 // the GNU General Public License.

00029

00030 //

00031 // ISO C++ 14882: 27.3 Standard iostream objects

00032 //

00033

00034 /\*\* @file iostream

00035 \* This is a Standard C++ Library header. You should @c #include this header

00036 \* in your programs, rather than any of the "st[dl]\_\*.h" implementation files.

00037 \*/

00038

00039 #ifndef \_GLIBCXX\_IOSTREAM

00040 #define \_GLIBCXX\_IOSTREAM 1

00041

00042 #pragma GCC system\_header

00043

00044 #include <bits/c++config.h>

00045 #include <ostream>

00046 #include <istream>

00047

00048 namespace std

00049 {

00050 /\*\*

00051 \* @name Standard Stream Objects

00052 \*

00053 \* The &lt;iostream&gt; header declares the eight <em>standard stream

00054 \* objects</em>. For other declarations, see

00055 \* http://gcc.gnu.org/onlinedocs/libstdc++/27\_io/howto.html#10 and the

00056 \* @link s27\_2\_iosfwd I/O forward declarations @endlink

00057 \*

00058 \* They are required by default to cooperate with the global C library's

00059 \* @c FILE streams, and to be available during program startup and

00060 \* termination. For more information, see the HOWTO linked to above.

00061 \*/

00062 //@{

00063 extern istream cin; ///< Linked to standard input

00064 extern ostream cout; ///< Linked to standard output

00065 extern ostream cerr; ///< Linked to standard error (unbuffered)

00066 extern ostream clog; ///< Linked to standard error (buffered)

00067

00068 #ifdef \_GLIBCXX\_USE\_WCHAR\_T

00069 extern wistream wcin; ///< Linked to standard input

00070 extern wostream wcout; ///< Linked to standard output

00071 extern wostream wcerr; ///< Linked to standard error (unbuffered)

00072 extern wostream wclog; ///< Linked to standard error (buffered)

00073 #endif

00074 //@}

00075

00076 // For construction of filebuffers for cout, cin, cerr, clog et. al.

00077 static ios\_base::Init \_\_ioinit;

00078 } // namespace std

00079

00080 #endif /\* \_GLIBCXX\_IOSTREAM \*/