



## Header File

Header file is a collection of pre-defined data types, constants, macros, structures and functions. 'C' is comprised of several header files having the extension ".h". If the programmer is using any pre-defined data-type or constant or macro or structure or function in the programmer, then the name of the header file should be specified at the very top of the program.

Header File	Content
stdio.h	functions that perform standard input/ output operations
conio.h	functions that perform console input/ output operations
string.h	functions that perform string operations
math.h	functions that perform mathematical operations
malloc.h	functions that perform operations on memory devices
graphics.h	functions that perform graphics related operations
etc.	

## Pre- Processor Directive

There are two pre-processor operators "#" and "##". There are a number of pre-processor directives in 'C'. These directives direct the pre-processor of the program or the compiler to perform certain defined task before and while compilation process of the program. Some of the pre-processor directives and their task has been listed and described below:

### a. #include

This pre-processor directive is used to specify the header file in which the used data-type, constant, macro, structure or function has been defined and used in the program. Once a header file name has been specified at the very top of the program, the programmer can use any number of elements defined in the header file in the program.

Such as, writing

```
#include<stdio.h>
```

enables the programmer to use printf(), scanf(), gets(), puts(), or all the other functions defined in the header file "stdio.h".

### b. #define

#define is pre-processor directive that can be used in the program to define symbolic constant or macro in the program. Symbolic constant means a constant by an identifier name.

Such as,

```
#define PI 3.14
```

Every occurrence of PI identifier name in the program will replace the word 3.14 when the program is compiled.