

C LIBRARY MACRO - ASSERT

http://www.tutorialspoint.com/c_standard_library/c_macro_assert.htm

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Description

The C library macro **void assert(expression)** allows diagnostic information to be written to the standard error file. In other words, it can be used to add diagnostics in your C program.

Declaration

Following is the declaration for assert Macro.

```
void assert(int expression);
```

Parameters

- **expression** – This can be a variable or any C expression. If **expression** evaluates to TRUE, assert does nothing. If **expression** evaluates to FALSE, assert displays an error message on **stderr** *standarderrorstreamtodisplayerrormessagesanddiagnostics* and aborts program execution.

Return Value

This macro does not return any value.

Example

The following example shows the usage of assert macro –

```
#include <assert.h>
#include <stdio.h>
int main()
{
    int a;
    char str[50];

    printf("Enter an integer value: ");
    scanf("%d", &a);
    assert(a >= 10);
    printf("Integer entered is %d\n", a);

    printf("Enter string: ");
    scanf("%s", &str);
    assert(str != NULL);
    printf("String entered is: %s\n", str);

    return(0);
}
```

Let us compile and run the above program in the interactive mode as shown below –

```
Enter an integer value: 11
Integer entered is 11
Enter string: tutorialspoint
String entered is: tutorialspoint
```

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