# C LIBRARY MACRO - ASSERT()

## Description

The C library macro **void assert(int expression)** allows diagnostic information to be written to the standard error file. In other words, 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 and aborts program execution.

## Return Value

This macro does not return any value.

## Example

The following example shows the usage of assert() macro

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

int main()
{
   int a;
   char str[50];

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

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

   return(0);
}
```

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

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