

C library function - ceil()

Description

The C library function **double ceil(double x)** returns the smallest integer value greater than or equal to **x**.

Declaration

Following is the declaration for ceil() function.

```
double ceil(double x)
```

Parameters

- **x** – This is the floating point value.

Return Value

This function returns the smallest integral value not less than **x**.

Example

The following example shows the usage of ceil() function.

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

int main () {
    float val1, val2, val3, val4;

    val1 = 1.6;
    val2 = 1.2;
    val3 = 2.8;
    val4 = 2.3;

    printf ("value1 = %.1lf\n", ceil(val1));
    printf ("value2 = %.1lf\n", ceil(val2));
    printf ("value3 = %.1lf\n", ceil(val3));
    printf ("value4 = %.1lf\n", ceil(val4));

    return(0);
}
```

Let us compile and run the above program that will produce the following result –

```
value1 = 2.0  
value2 = 2.0  
value3 = 3.0  
value4 = 3.0
```