C library function - floor()

Description

The C library function **double floor(double x)** returns the largest integer value less than or equal to **x**.

Declaration

Following is the declaration for floor() function.

```
double floor(double x)
```

Parameters

- ▫ **x** − This is the floating point value.

Return Value

This function returns the largest integral value not greater than x.

Example

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

```c
#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", floor(val1));
   printf("Value2 = %.1lf\n", floor(val2));
   printf("Value3 = %.1lf\n", floor(val3));
   printf("Value4 = %.1lf\n", floor(val4));

   return(0);
}
```

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

```
Value1 = 1.0
Value2 = 1.0
Value3 = 2.0
Value4 = 2.0
```