# C library function - sinh()

## **Description**

The C library function **double sinh(double x)** returns the hyperbolic sine of  $\mathbf{x}$ .

#### **Declaration**

Following is the declaration for sinh() function.

```
double sinh(double x)
```

#### **Parameters**

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

#### **Return Value**

This function returns hyperbolic sine of x.

### **Example**

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

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

int main () {
    double x, ret;
    x = 0.5;

    ret = sinh(x);
    printf("The hyperbolic sine of %lf is %lf degrees", x, ret);

    return(0);
}
```

Let us compile and run the above program, this will produce the following result -

```
The hyperbolic sine of 0.500000 is 0.521095 degrees
```