

## C library function - asin()

### Description

The C library function **double asin(double x)** returns the arc sine of **x** in radians.

### Declaration

Following is the declaration for asin() function.

```
double asin(double x)
```

### Parameters

- **x** – This is the floating point value in the interval [-1,+1].

### Return Value

This function returns the arc sine of x, in the interval [-pi/2,+pi/2] radians.

### Example

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

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

#define PI 3.14159265

int main () {
    double x, ret, val;
    x = 0.9;
    val = 180.0 / PI;

    ret = asin(x) * val;
    printf("The arc sine of %lf is %lf degrees", x, ret);

    return(0);
}
```

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

```
The arc sine of 0.900000 is 64.158067 degrees
```