

C LIBRARY FUNCTION - ACOS

http://www.tutorialspoint.com/c_standard_library/c_function_acos.htm

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Description

The C library function **double acos***double* *x* returns the arc cosine of *x* in radians.

Declaration

Following is the declaration for acos function.

```
double acos(double x)
```

Parameters

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

Return Value

This function returns principal arc cosine of *x*, in the interval [0, pi] radians.

Example

The following example shows the usage of acos 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 = acos(x) * val;
    printf("The arc cosine 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 cosine of 0.900000 is 25.855040 degrees
```

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