

C LIBRARY FUNCTION - ATOF

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

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Description

The C library function **double atof***constchar * str* converts the string argument **str** to a floating-point number *typedouble*.

Declaration

Following is the declaration for atof function.

```
double atof(const char *str)
```

Parameters

- **str** -- This is the string having the representation of a floating-point number.

Return Value

This function returns the converted floating point number as a double value. If no valid conversion could be performed, it returns zero 0.0.

Example

The following example shows the usage of atof function.

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int main()
{
    float val;
    char str[20];

    strcpy(str, "98993489");
    val = atof(str);
    printf("String value = %s, Float value = %f\n", str, val);

    strcpy(str, "tutorialspoint.com");
    val = atof(str);
    printf("String value = %s, Float value = %f\n", str, val);

    return(0);
}
```

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

```
String value = 98993489, Float value = 98993488.000000
String value = tutorialspoint.com, Float value = 0.000000
Loading [MathJax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js
```