C LIBRARY FUNCTION - STRTOD

http://www.tutorialspoint.com/c standard library/c function strtod.htm

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Description

The C library function **double strtod**constchar * str, char * * endptr converts the string pointed to by the argument **str** to a floating-point number typedouble. If **endptr** is not NULL, a pointer to the character after the last character used in the conversion is stored in the location referenced by endptr.

Declaration

Following is the declaration for strtod function.

```
double strtod(const char *str, char **endptr)
```

Parameters

- **str** -- This is the value to be converted to a string.
- **endptr** -- This is the reference to an already allocated object of type char*, whose value is set by the function to the next character in *str* after the numerical value.

Return Value

This function returns the converted floating point number as a double value, else zero value 0.0 is returned.

Example

The following example shows the usage of strtod function.

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

int main()
{
    char str[30] = "20.30300 This is test";
    char *ptr;
    double ret;

    ret = strtod(str, &ptr);
    printf("The number(double) is %lf\n", ret);
    printf("String part is |%s|", ptr);

    return(0);
}
```

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

```
The number(double) is 20.303000
String part is | This is test|
Loading [MathJax]/jax/output/HTML-CSS/jax.js
```