

C library function - mbtowc()

Description

The C library function **int mbtowc(wchar_t *pwc, const char *str, size_t n)** converts a multibyte sequence to a wide character.

Declaration

Following is the declaration for mbtowc() function.

```
int mbtowc(wchar_t *pwc, const char *str, size_t n)
```

Parameters

- **pwc** – This is the pointer to an object of type wchar_t.
- **str** – This is the pointer to the first byte of a multi-byte character.
- **n** – This is the maximum number of bytes to be checked for character length.

Return Value

- If str is not NULL, the mbtowc() function returns the number of consumed bytes starting at str, or 0 if s points to a null byte, or -1 upon failure.
- If str is NULL, the mbtowc() function returns non-zero if the encoding has non-trivial shift state, or zero if the encoding is stateless.

Example

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

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

int main () {
    char *str = "This is tutorialspoint.com";
    wchar_t mb[100];
    int len;

    len = mblen(NULL, MB_CUR_MAX);

    mbtowc(mb, str, len*strlen(str) );
```

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```
wprintf(L"%ls \n", mb );  
  
return(0);  
}
```

Let us compile and run the above program that will produce the following result which will be in multi-byte, a kind of binary output.

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