C library function - mblen()

Description

The C library function **int mblen(const char *str, size_t n)** returns the length of a multi-byte character pointed to, by the argument **str**.

Declaration

Following is the declaration for mblen() function.

```
int mblen(const char *str, size_t n)
```

Parameters

- **str** − This is the pointer to the first byte of a multibyte character.
- **n** − This is the maximum number of bytes to be checked for character length.

Return Value

The mblen() function returns the number of bytes passed from the multi-byte sequence starting at str, if a non-null wide character was recognized. It returns 0, if a null wide character was recognized. It returns -1, if an invalid multi-byte sequence was encountered or if it could not parse a complete multi-byte character.

Example

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

Live Demo

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

int main () {
   int len;
   char *pmbnull  = NULL;
   char *pmb = (char *)malloc( MB_CUR_MAX );
   wchar_t *pwc = L"Hi";
   wchar_t *pwcs = (wchar_t *)malloc( sizeof( wchar_t ));

   printf("Converting to multibyte string\n");
   len = wcstombs( pmb, pwc, MB_CUR_MAX);
```

```
   printf("Characters converted %d\n", len);
   printf("Hex value of first multibyte character: %#.4x\n", pmb);

   len = mblen( pmb, MB_CUR_MAX );
   printf( "Length in bytes of multibyte character %x: %u\n", pmb, len );

   pmb = NULL;

   len = mblen( pmb, MB_CUR_MAX );
   printf( "Length in bytes of multibyte character %x: %u\n", pmb, len );

   return(0);
}
```

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

```
Converting to multibyte string
Characters converted 1
Hex value of first multibyte character: 0x168c6010
Length in bytes of multibyte character 168c6010: 1
Length in bytes of multibyte character 0: 0
```