

C library function - wctomb()

Description

The C library function **int wctomb(char *str, wchar_t wchar)** function converts the wide character **wchar** to its multibyte representation and stores it at the beginning of the character array pointed to by **str**.

Declaration

Following is the declaration for wctomb() function.

```
int wctomb(char *str, wchar_t wchar)
```

Parameters

- **str** – This is the pointer to an array large enough to hold a multibyte character,
- **wchar** – This is the wide character of type wchar_t.

Return Value

- If str is not NULL, the wctomb() function returns the number of bytes that have been written to the byte array at str. If wchar cannot be represented as a multibyte sequence, -1 is returned.
- If str is NULL, the wctomb() 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 wctomb() function.

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

int main () {
    int i;
    wchar_t wc = L'a';
    char *pmbnull = NULL;
    char *pmb = (char *)malloc(sizeof( char ));

    printf("Converting wide character:\n");
    i = wctomb( pmb, wc );
```

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```
printf("Characters converted: %u\n", i);
printf("Multibyte character: %.1s\n", pmb);

printf("Trying to convert when target is NULL:\n");
i = wctomb( pmbnull, wc );
printf("Characters converted: %u\n", i);
/* this will not print any value */
printf("Multibyte character: %.1s\n", pmbnull);

return(0);
}
```

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

```
Converting wide character:
Characters converted: 1
Multibyte character: a
Trying to convert when target is NULL:
Characters converted: 0
Multibyte character:
```