

strcpy() - This function is used to copy string by a source including the Null characters.

The syntax is `strcpy(destination, source);`

EXAMPLE

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

int main() {

    char source[2000] = "Hello World!";
    char destination[2000];

    strcpy(destination,source);

    printf("Source is %s\nDestination is %s",source,destination);

    return 0;
}
```

The output of the give code will be

```
Source is Hello World!
Destination is Hello World!
```

We can also chain together a series of strcpy calls

EXAMPLE

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

int main() {

    char str1[2000] = "Hello World!";
    char str2[2000];
    char str3[2000];

    strcpy(str3,strcpy(str2,str1));

    printf("Str1 is %s\nStr2 is %s\nStr3 is %s",str1,str2,str3);

    return 0;
}
```

The output will be

```
Str1 is Hello World!
Str2 is Hello World!
Str3 is Hello World!
```

strncpy() – When the size of the source is greater than the destination it will show undefined problems.

To avoid this error we use `strncpy()` function.

The syntax is (destination, source, n);

n refers upto which the characters will be copied.

The `strncpy()` function doesn't add the null character(`'\0'`) in the destination, if the size of source is greater than or equal to the size of destination. So we have to manually declare the null character.

EXAMPLE

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

int main() {

    char source[13] = "Hello World!";
    char destination[6];

    strncpy(destination,source,sizeof(destination)); /* This will store the the characters upto
    | | | | | | | | | | | | | | sizeof(destination) in the destination string array */
    destination[sizeof(destination) - 1] = '\0'; // this adds the null character at the end of the array

    printf("Source is %s\nDestination is %s",source,destination);

    return 0;
}
```

The output will be

```
Source is Hello World!  
Destination is Hello
```

In simple words it can be said that `strncpy()` function copies the character up to `n` from the source to destination. But `strncpy` doesn't add the null character. So we have to manually append it to the array of characters as seen in the example.