

# Strings in C++

## - Defining a string

```
char *x = "Tiger";
```

T	i	g	e	r	\0
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```
char y[] = "Computer Science";
```

## - length of a string.

```
int len = strlen(x); // 5
```

## - Concatenation.

```
char *z = "Mother";
```

```
strcat(x, z); // *x = "Tiger Mother"
```

```
strncat(x, z, 3); // *x = "Tiger Mot"
```

↳ # of characters to be used for concatenation in the source

## - Copy.

```
strcpy(x, z); // *x = "Mother"
```

```
strncpy(x, z, 3); // *x = "Mot"
```

↳ # of characters in the source to be copied.

```
char *w;
```

```
w = strdup(z); // *w = "Mother"
```

↳ return a duplicate of an input string

## - Comparing strings.

int strcmp(char \*s1, char \*s2), returns -

- a negative value if  $s1 < s2$
- 0, if  $s1$  and  $s2$  are equal
- a positive value if  $s1 > s2$ .

stricmp(char \*s1, char \*s2): neglect the cases in  $s1$  and  $s2$ . (i.e. upper or lower cases)

`strncmp(char* s1, char* s2, int n)`: Compare the first  $n$  characters in  $s1$  and  $s2$ .

`int strnicmp(char* s1, char* s2, int n)`: Compare the first  $n$  characters in  $s1$  and  $s2$  in a case-insensitive way.