



Fundamental Coding with C

Strings

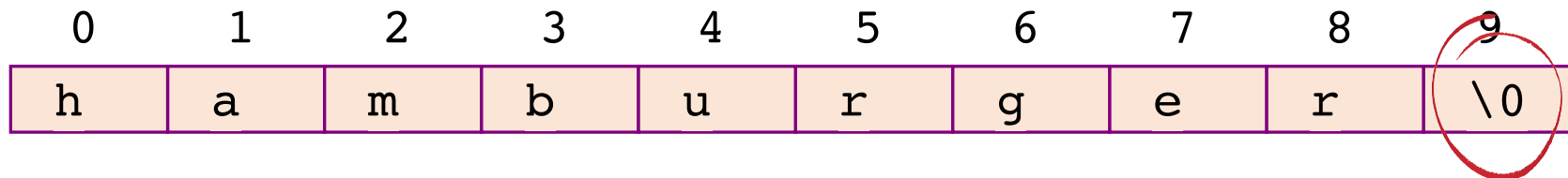


Strings

A string is a type of character array used in programming to represent text. It consists of a set of characters that can also contain spaces and numbers.

For example:

- The word "hamburger"



An array of characters in C terminated by the null character '\0'



Strings

You can initialize C strings in different ways. Let's consider some examples of various methods for declaring a string:

```
char name[ ] = "Code Is Loading";
```

```
char name1[ ] = {'C','o','d','e',' ','I','s',' ','L','o','a','d','i','n','g','\0'};
```

```
char name[30] = "Code Is Loading";
```

```
char name1[30] = {'C','o','d','e',' ','I','s',' ','L','o','a','d','i','n','g','\0'};
```



Strings

C language offers various functions associated with strings:

Function	Meaning	Explanation
<code>strlen(s)</code>	String Length	We use it to find the length of the string.
<code>strcpy(s1,s2)</code>	String Copy	We use to copy the value of the second string argument to the first string argument.
<code>strcat(s1,s2)</code>	String Concatenation	We use to join the second string argument to the end of the first string argument.
<code>strcmp(s1,s2)</code>	String Compare	We use it to compare both the string arguments. It will return 0, if s1 and s2 are equal; Less than 0 if s1<s2; Greater than 0 if s1>s2



Strings

To use strings functions in our program, we need to include string.h header file, write at the begin of the program:

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



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It's time to try

<https://repl.it/languages/c>





Strings

```
#include <stdio.h>
int main()
{
printf("Code is Loading!\n\n");
char name[30];
printf("Enter the string: ");
scanf("%s", name);
printf("The string is %s\n", name);
return 0;
}
```



Strings

```
#include <stdio.h>
#include <string.h>
int main ()
{
printf("Welcome to Code is Loading!\n");
char s1[30] = "Code";
char s2[30] = " is Loading";
char s3[30];
int length;
length = strlen(s1); /*length of s1*/
printf("The length of s1 = %s is: %d\n", s1, length);
strcpy(s3, s1); /*s1 is copied in s3*/
printf("The copied value of s3 is: %s\n", s3 );
return 0;
}
```