



Methods to concatenate string in C/C++ with Examples

Last Updated: 20-02-2019

There are various ways to concatenate strings. We will discuss each one by one.

Method 1: Using strcat() function.

The strcat() function is defined in "string.h" header file.

Syntax:

```
char * strcat(char * init, const char * add)
```

The init and add string should be of character array(char*). This function concatenates the added string to the end of the init string.



সব হবে এখন ফুল স্পিডে

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Example:

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    char init[] = "this is init";
    char add[] = " added now";
```

```
1 // concatenating the string.
2 strcat(init, add);
3
4 cout << init << endl;
5
6 return 0;
7 }
```

Output:

```
this is init added now
```

Method 2: Using append() function.**Syntax:**

```
string& string::append (const string& str)
```

str: the string to be appended.

Here str is the object of std::string class which is an instantiation of the basic_string class template that uses char (i.e., bytes) as its character type. The append function appends the add(variable) string at the end of the init string.

Example:

```
1 #include <bits/stdc++.h>
2 using namespace std;
3
4 int main()
5 {
6     string init("this is init");
7     string add(" added now");
8
9     // Appending the string.
10    init.append(add);
11
12    cout << init << endl;
13    return 0;
14 }
```

Output:

```
this is init added now
```

Method 3: Using '+' Operator

Syntax:

```
string new_string = string init + string add;
```

This is the most easiest method for concatenation of two string. The + operator simply adds the two string and returns a concatenated string.

Example:

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    string init("this is init");
    string add(" added now");

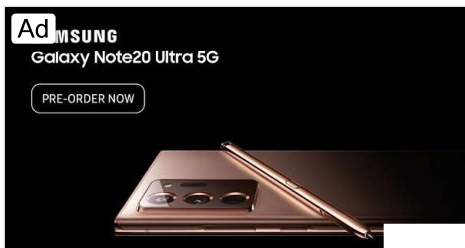
    // Appending the string.
    init = init + add;

    cout << init << endl;
    return 0;
}
```

Output:

```
this is init added now
```


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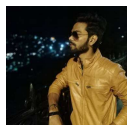
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Max Payne • a year ago

Please, delete or fix "Method 1: Using strcat() function." It is just a complete garbage that leads to buffer overflow: `init` buffer is too small for resulting string.

Correct example should be:

```
#include <bits/stdc++.h>
using namespace std;
```

```
int main()
{
    // Make sure enough space is reserved
    char init[256] = "this is init";
    char add[] = " added now";

    // concatenating the string.
    strcat(init, add);

    cout << init << endl;

    return 0;
}
```

1 ^ | v • Reply • Share ›



Oleh Kravchenko → Max Payne • a year ago

Please consider to use strncat()

```
int main()
{
    // Make sure enough space is reserved
    char init[256] = "this is init";
    char add[] = " added now";

    // concatenating the string.
    strncat(init, add, sizeof(init) - 1);

    cout << init << endl;

    return 0;

}
```

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Param Mittal • 2 years ago

Really a good article....

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