

Write a class STRING that can be used to  
store strings, add strings, equate string,  
output string

# Strings

[GitHub Link](#)

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## CODE

```
1  /*
2   Write a class STRING that can be used to store strings, add strings, equate string, output string
3   */
4
5   #include <iostream>
6   using namespace std;
7
8   class String
9   {
10  private:
11      char str[50];
12      int size;
13
14  public:
15      int calSize(char arr[])
16      {
17          int length = 0;
18
19          for (int i = 0; arr[i] != '\0'; i++)
20          {
21              ++length;
22          }
23
24          return length;
25      }
26
27      void store(char arr[])
28      {
29          size = calSize(arr);
30
31          for (int i = 0; i < size; i++)
32          {
33              str[i] = arr[i];
34          }
35      }
36
37      void add(char arr1[], char arr2[])
38      {
39          int len1 = calSize(arr1);
40          int len2 = calSize(arr2);
41
42          store(arr1);
43
44          for (int i = 0; i <= len2; i++)
45          {
46              str[len1 + i] = arr2[i];
47          }
48
49          output(str);
50      }
```

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```

51
52     void equate(char arr1[], char arr2[])
53     {
54         size = calSize(arr1);
55         int flag = 0;
56
57         for (int i = 0; i < size; i++)
58         {
59             if (arr1[i] != arr2[i])
60             {
61                 cout<<"The strings are not equal\n";
62                 flag = 1;
63                 break;
64             }
65         }
66         if (flag == 0)
67         {
68             cout<<"The strings are equal\n";
69         }
70     }
71
72     void output(char arr[])
73     {
74         size = calSize(arr);
75
76         for(int i = 0; i < size; i++)
77         {
78             cout<<arr[i];
79         }
80         cout<<endl;
81     }
82 };
83
84 int main()
85 {
86     String obj;
87     char str1[] = "Hello";
88     char str2[] = "World";
89     char str3[] = "Hello";
90
91     obj.add(str1, str2);
92     obj.equate(str1, str2);
93     obj.equate(str1, str3);
94
95     return 0;
96 }

```

## OUTPUT

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PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

```

PS D:\CUH\4th Sem\OOP with C++\Lab\6. Strings> cd "d:\CUH\4th Sem\OOP with C++\Lab\6. Strings\" ; if ($?) { g++ Strings.cpp -o Strings } ; if ($?) { .\Strings }
HelloWorld
The strings are not equal
The strings are equal
PS D:\CUH\4th Sem\OOP with C++\Lab\6. Strings> █

```