



ITIS-LS "Francesco Giordani" Caserta

prof. Ennio Ranucci

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String C++

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Variable	H	e	l	l	o	\0
Address	0x23451	0x23452	0x23453	0x23454	0x23455	0x23456

strcpy(s1, s2); //Copies string s2 into string s1.

strcat(s1, s2); // Concatenates string s2 onto the end of string s1.

strlen(s1); //Returns the length of string s1.

strcmp(s1, s2); //Returns 0 if s1 and s2 are the same; less than 0 if s1<s2; greater than 0 if s1>s2.

Es1

```
#include <iostream>
using namespace std;
int main ()
{
    char messaggio[6] = {'H', 'e', 'l', 'l', 'o', '\0'};
    cout << "Saluto: ";
    cout << messaggio << endl;
    return 0;
}
```

Es2

```
#include <iostream>
#include <cstring>
using namespace std;
int main ()
{
    char str1[10] = "Hello";
    char str2[10] = "World";
    char str3[10];
    int len ;
    // copy str1 into str3
    strcpy( str3, str1);
    cout << "strcpy( str3, str1) : " << str3 << endl;
    // concatenates str1 and str2
    strcat( str1, str2);
    cout << "strcat( str1, str2): " << str1 << endl;
    // total length of str1 after concatenation
    len = strlen(str1);
    cout << "strlen(str1) : " << len << endl;
    return 0;
}
```

Es3

```
#include <iostream>
#include <string>
using namespace std;
int main ()
{
    string str1 = "Hello";
    string str2 = "World";
    string str3;
    int len ;
    // copy str1 into str3
    str3 = str1;
    cout << "str3 : " << str3 << endl;
    // concatenates str1 and str2
    str3 = str1 + str2;
    cout << "str1 + str2 : " << str3 << endl;
    // total length of str3 after concatenation
    len = str3.size();
    cout << "str3.size() : " << len << endl;
    return 0;
}

// inserting into a string
#include <iostream>
#include <string>
int main ()
{
    std::string str="to be question";
    std::string str2="the ";
    std::string str3="or not to be";
    std::string::iterator it;
    // used in the same order as described above:
    str.insert(6,str2);          // to be (the )question
    str.insert(6,str3,3,4);     // to be (not )the question
    str.insert(10,"that is cool",8); // to be not (that is )the question
    str.insert(10,"to be ");    // to be not (to be )that is the question
    str.insert(15,1,':');       // to be not to be(:) that is the question
    it = str.insert(str.begin()+5,','); // to be(,) not to be: that is the question
    str.insert (str.end(),3,'.'); // to be, not to be: that is the question(...)
    str.insert (it+2,str3.begin(),str3.begin()+3); // (or )
    std::cout << str << '\n';
    return 0;
}
```

OrdinaVet

```
#include<string>

#include<iostream>

#include <sstream>

using namespace std;

struct cassa
{
    string denominazioneCassa;
    string operatoreCassa;
    float incasso;
}cassaVet[10];

string nome;

int main()
{
    int const numElementi=3;

    for(int i=0;i<numElementi;i++)
    {
        stringstream ss;

        ss<<i;

        cassaVet[i].denominazioneCassa="Cassa"+ss.str();

        cout<<"Inserisci il nome dell'operatore: ";

        cin>>nome;

        cassaVet[i].operatoreCassa="Matr"+ss.str()+nome;

        cassaVet[i].incasso=100*i;

    }

    cassa cassaAppoggio;

    for(int i=0;i<numElementi;i++)

        for(int j=i+1; j<numElementi; j++)

            if(cassaVet[i].denominazioneCassa>cassaVet[j].denominazioneCassa)
```

```
{
    cassaAppoggio=cassaVet[i];
    cassaVet[i]=cassaVet[j];
    cassaVet[j]=cassaAppoggio;
}
for(int i=0;i<numElementi;i++)
    cout<<cassaVet[i].denominazioneCassa<<" "
    <<(cassaVet[i].operatoreCassa).substr(0,5)<<" "
    << cassaVet[i].incasso<<endl;
return 0;
}
```