

```

// basic_string_ctor.cpp
// compile with: /EHsc
#include <string>
#include <iostream>

int main( )
{
    using namespace std;

    // The first member function initializing with a C-string
    const char *cstr1a = "Hello Out There.";
    basic_string <char> str1a ( cstr1a , 5);
    cout << "The string initialized by C-string cstr1a is: "
         << str1a << "." << endl;

    // The second member function initializing with a string
    string str2a ( "How Do You Do?" );
    basic_string <char> str2b ( str2a , 7 , 7 );
    cout << "The string initialized by part of the string "
         << "cstr2a is: "
         << str2b << "." << endl;

    // The third member function initializing a string
    // with a number of characters of a specific value
    basic_string <char> str3a ( 5, '9' );
    cout << "The string initialized by five number 9s is: "
         << str3a << endl;

    // The fourth member function creates an empty string
    // and string with a specified allocator
    basic_string <char> str4a;
    string str4b;
    basic_string <char> str4c ( str4b.get_allocator( ) );
    if (str4c.empty( ) )
        cout << "The string str4c is empty." << endl;
    else
        cout << "The string str4c is not empty." << endl;

    // The fifth member function initializes a string from
    // another range of characters
    string str5a ( "Hello World" );
    basic_string <char> str5b(str5a.begin( ) + 5, str5a.end( ));
    cout << "The string initialized by another range is: "
         << str5b << "." << endl;

    //self
    string *ps = new string(5, '9');
    cout<<"*ps = "<<*ps<<endl;
    cin.get();
}

```