1. Define CMyString class with demands as follows:

    1.1   The class, CMyString, can save any string which means an arbitary length;

    1.2   Overload appropriate operators to operate instance of CMyString in the main;

    1.3   Define Find( ) member function to locate the first position of searching a character or a string;

    1.4   Define Mid( ) member function to get substring from one string;

    1.5   Define type operator and other member functions if you need.

    1.6   The client can use CMyString you defined like as in the main:

```cpp
void main()
{
    CMyString s1("BIT"), s2;

    s2 = "love";
    s2[0] = 'L'
    cout << "I " + s2 + << " " << s1 << endl;      // The output is:  I Love BIT

    int pos = s1.Find('T');      // pos is 2, or -1 if  'T'  is not found.
    pos = s1.Find("IT");         // pos is 1, or -1 if  "IT"  is not found.
    pos = s1.Find("b");          // pos is -1

    int startPos = 3, len = 4;
    s2 = "Welcome";
    // In the Mid, startPos represents starting position, len represents the length
    // of substring.
    CMyString myStr = s2.Mid(startPos, len);     // myStr  is "come"

    CMyString str_num(123);    //  str_num is "123"
    int a = str_num;

    str_num = -123.456;
    double b = str_num;
}
```

    NOTE: The type such as string or template in C++, and string library in C and C++ are both FORBIDDEN in your program. The only one you can define is char*.

2. Define CInternetURL class to save a URL string like as "www.bit.edu.cn"，and finish the demands as follows:

   2.1   Only use CMyString you just finished before to save URL string；

CInternetURL   *URL*("https://jwc.bit.edu.cn/index.htm");

   2.2   Define member function getDomain() to get domain from URL.
           For example, we can get   "www.bit.edu.cn"   from   ***URL***
   2.3   Define member function getDomainCountry() to get country name in the domain from URL, such as "us", "uk", etc.
           For example, we can get   "cn"   from   ***URL***
   2.4   Define member function getDomainType() to get domain type from URL, such as "gov", "com", "org", and so on.
           For example, we can get   "edu"   from   ***URL***
   2.5   Define member function getHomePage() to get home page from URL, such as "index.htm", "default.htm", and so on.
           For example, we can get   "index"   from   ***URL***
   2.6   The string you CAN ONLY use is CMyString in the main:

```
 int main()
 {
     CInternetURL URL("https://jwc.bit.edu.cn/index.htm"), s2;

      cout << URL.GetDomain();                // The result is:   www.bit.edu.cn
       cout << URL.GetDomainCountry();         // The result is:   cn
     cout << URL.GetDomainType();           // The result is:   edu
      cout << URL.GetHomePage();             // The result is:   index.htm

      return 0;
 }
```