Hw702測試報告

S1081444 張家豪

MyString(const char *s)

```
12          MyString s1(A);
13          cout << "A[] = " << A << endl;
14          cout << "s1(A) = " << s1 << endl;
15          cout << "   ans = " << "Good morning!" << endl;
```

將A[] = "Good morning"存入s1

```
A[] = Good morning!
s1(A) = Good morning!
   ans = Good morning!
```

MyString(const MyString &str)

```
17        MyString s2(s1);
18        cout << "s2(s1) = " << s2 << endl;
19        cout << "    ans = " << "Good morning!" << endl;
```

將s1存入s2

```
s2(s1) = Good morning!
    ans = Good morning!
```

MyString(const MyString &str, size_t pos, size_t len=msize)

s3:擷取
s1[5]~s1[11]
(morning)
S4: 從s1[5]
開始擷取
(morning!)

```
21          MyString s3(s1, 5, 7);
22          cout << "s3(s1, 5, 7) = " << s3 << endl;
23          cout << "           ans = " << "morning" << endl;
24
25          MyString s4(s1, 5);
26          cout << "s4(s1, 5) = " << s4 << endl;
27          cout << "        ans = " << "morning!" << endl;
```

```
s3(s1, 5, 7) = morning
           ans = morning
s4(s1, 5) = morning!
        ans = morning!
```

append(const MyString &str)

```
29          char B[] = "Happy ";
30          MyString s5(B);
31          cout << "B[] = " << B << endl;
32          cout << "s5(B) = " << s5 << endl;
33          char C[] = "birthday!";
34          MyString s6(C);
35          cout << "C[] = " << C << endl;
36          cout << "s6(C) = " << s6 << endl;
37          cout << "s5.append(s6) = " << s5.append(s6) << endl;
38          cout << "          ans = " << "Happy birthday!" << endl;
```

將一個MyString接在另一
個MyString後面

```
B[] = Happy
s5(B) = Happy
C[] = birthday!
s6(C) = birthday!
s5.append(s6) = Happy birthday!
          ans = Happy birthday!
```

insert(size_t pos, const MyString &str)

```
40          char D[] = "Happy Year!!!";
41          MyString s7(D);
42          cout << "D[] = " << D << endl;
43          cout << "s7(D) = " << s7 << endl;
44          char E[] = "new ";
45          MyString s8(E);
46          cout << "E[] = " << E << endl;
47          cout << "s8(E) = " << s8 << endl;
48          cout << "s7.insert(6, s8) = " << s7.insert(6, s8) << endl;
49          cout << "                  ans = " << "Happy new Year!!!" << endl;
```

將s8從s7[6]插入

```
D[] = Happy Year!!!
s7(D) = Happy Year!!!
E[] = new
s8(E) = new
s7.insert(6, s8) = Happy new Year!!!
                 ans = Happy new Year!!!
```

insert(size_t pos, const MyString &str, size_t subpos, size_t sublen)

```
51        char F[] = "A brand NEW car";
52        MyString s9(F);
53        cout << "F[] = " << F << endl;
54        cout << "s9(F) = " << s9 << endl;
55        cout << "s7 = " << s7 << endl;
56        cout << "s7.insert(6, s9, 8, 3) = " << s7.insert(6, s9, 8, 4) << endl;
57        cout << "                        ans = " << "Happy NEW new Year!!!" << endl;
```

將s9[8]~s9[10]
從s7[6]插入

```
F[] = A brand NEW car
s9(F) = A brand NEW car
s7 = Happy new Year!!!
s7.insert(6, s9, 8, 3) = Happy NEW new Year!!!
                        ans = Happy NEW new Year!!!
```

substr(size_t pos, size_t len)

```
59    char G[] = "Nice to meet you.";
60    MyString s10(G);
61    cout << "G[] = " << G << endl;
62    cout << "s10(G) = " << s10 << endl;
63    cout << "s10.substr(8, 4) = " << s10.substr(8, 4) << endl;
64    cout << "                   ans = " << "meet" << endl;
```

擷取字串的一段

```
G[] = Nice to meet you.
s10(G) = Nice to meet you.
s10.substr(8, 4) = meet
                  ans = meet
```

erase(size_t pos, size_t len)

```
66          char H[] = "Have a nice nice nice day.";
67          MyString s11(H);
68          cout << "H[] = " << H << endl;
69          cout << "s11(H) = " << s11 << endl;
70          cout << "s11.erase(7, 10) = " << s11.erase(7, 10) << endl;
71          cout << "                  ans = " << "Have a nice day." << endl;
```

將
s11[7]~s11[16]
刪除

```
H[] = Have a nice nice nice day.
s11(H) = Have a nice nice nice day.
s11.erase(7, 10) = Have a nice day.
                ans = Have a nice day.
```

find(const MyString &str, size_t pos)

```
73          char I[] = "You can say that again.";
74          MyString s12(I);
75          cout << "I[] = " << I << endl;
76          cout << "s12(I) = " << s12 << endl;
77          cout << "s12.find(\"that\") = ";
78          if (s12.find("that") == -1)
79          {
80              cout << "Not found" << endl;
81          }
82          else
83          {
84              cout << s12.find("that") << endl;
85          }
86          cout << "              ans = " << "12" << endl;
```

```
88          cout << "s12.find(\"treat\") = ";
89          if (s12.find("treat") == -1)
90          {
91              cout << "Not found" << endl;
92          }
93          else
94          {
95              cout << s12.find("treat") << endl;
96          }
97          cout << "              ans = " << "Not found" << endl;
```

```
I[] = You can say that again.
s12(I) = You can say that again.
s12.find("that") = 12
              ans = 12
s12.find("treat") = Not found
              ans = Not found
```

尋找指定字串在s12的起始點，若沒有則輸出 Not Found

find_first_of(const MyString &str, size_t pos)

```
99    char J[] = "This is cotton candy.";
100   MyString s13(J);
101   cout << "J[] = " << J << endl;
102   cout << "s13(J) = " << s13 << endl;
103   cout << "s13.find_first_of(\"that\") = ";
104   if (s13.find_first_of("free") == -1)
105   {
106       cout << "Not found" << endl;
107   }
108   else
109   {
110       cout << s13.find_first_of("free") << endl;
111   }
112   cout << "                    ans = " << "Not found" << endl;
```

```
114   cout << "s13.find_first_of(\"candy\") = ";
115   if (s13.find_first_of("candy") == -1)
116   {
117       cout << "Not found" << endl;
118   }
119   else
120   {
121       cout << s13.find_first_of("candy") << endl;
122   }
123   cout << "                    ans = " << "8" << endl;
```

```
J[] = This is cotton candy.
s13(J) = This is cotton candy.
s13.find_first_of( 'that") = Not found
                         ans = Not found
s13.find_first_of( 'candy") = 8
                         ans = 8
```

尋找指定字串中的字元在s13中第一個出現的位置，若沒有則輸出 Not found

operator<<

```
125        MyString s14;
126        cin >> s14;
127        cout << s14 << endl;
```

輸入=> hdtuyfcyifvjfc
輸出=> hdtuyfcyifvjfc