프로그래밍 언어 – string

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string

string

STL


```
string s1;

char c[] = "c string";
string s2(c);
string s3 = c;

c[1] = '\0';

string s4(c);
string s5 = c;

string s6(10, '!');
string s7 = "abcdefg";
```

string

STL


```
c string
c string
c
c
!!!!!!!!!!
abcdefg
```

string

STL


```
string s1, s2;
cin >> s1 >> s2;
cout << s1 << ' ' << s2;
```

단어의 개수

https://www.acmicpc.net/problem/1152

- https://gist.github.com/Baekjoon/32d83ef9853706fb2386

문자열 분석

https://www.acmicpc.net/problem/10820

- https://gist.github.com/Baekjoon/228b31a4f2fb84e49f0a

정수의 개수

https://www.acmicpc.net/problem/10821

- https://gist.github.com/Baekjoon/dcd8751c1ff39204483a
- getline의 세 번째 인자는 구분자

string

STL


```
string s1, s2;
cin >> s1 >> s2;
cout << s1 << ' ' << s2;
```

string

STL


```
string s = "abc";
printf("%s\n",s.c_str());

s += "def";
printf("%s\n",s.c_str());

s = "";
printf("%s\n",s.c_str());

s = "abcdefghijklmnopqrstuvwxyz";
printf("%s\n",s.c_str());
```

string

STL


```
string s = "book";
cout << s << ": " << s.size() << '\n';
cout << s << ": " << s.length() << '\n';
```

```
s = "";
```

0

```
cout << s << ": " << s.size() << '\n';
cout << s << ": " << s.size()-1 << '\n';
```

-1

string

STL


```
book: 4
book: 4
: 0
: 18446744073709551615
```

단어 길이 재기

https://www.acmicpc.net/problem/2743

- https://gist.github.com/Baekjoon/ca6054e85bad2a517002

string

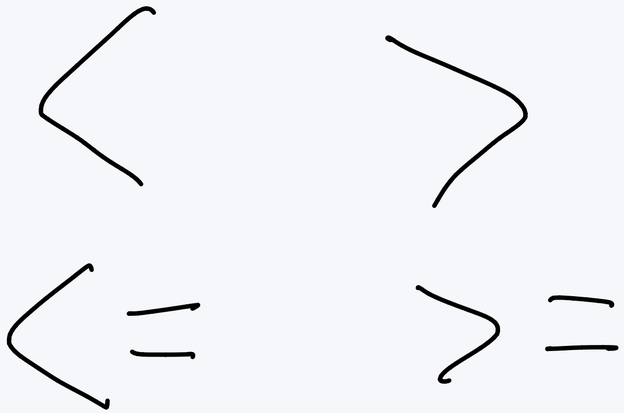
STL


```
string s = "book";
cout << s << ": " << s.empty() << '\n';

s = "";
cout << s << ": " << s.empty() << '\n';
```

string

STL

```
string s1 = "string";
string s2 = "stirng";

if (s1 == s2) {
    cout << "s1 == s2" << '\n';
} else if (s1 != s2) {
    cout << "s1 != s2" << '\n';
}
if (s1 < s2) {
    cout << "s1 < s2" << '\n';
} else if (s1 > s2) {
    cout << "s1 > s2" << '\n';
}
```



string

STL

```
string a = "Hello";
string b = "World";

string hello_world = a + " " + b;
hello_world += "!";

cout << hello_world << '\n';
```

Hello World!

string

STL


```
string a = "Hello";
string b = "World";

string hello_world = a + " " + b;
hello_world.push_back('!');

cout << hello_world << '\n';
```

string

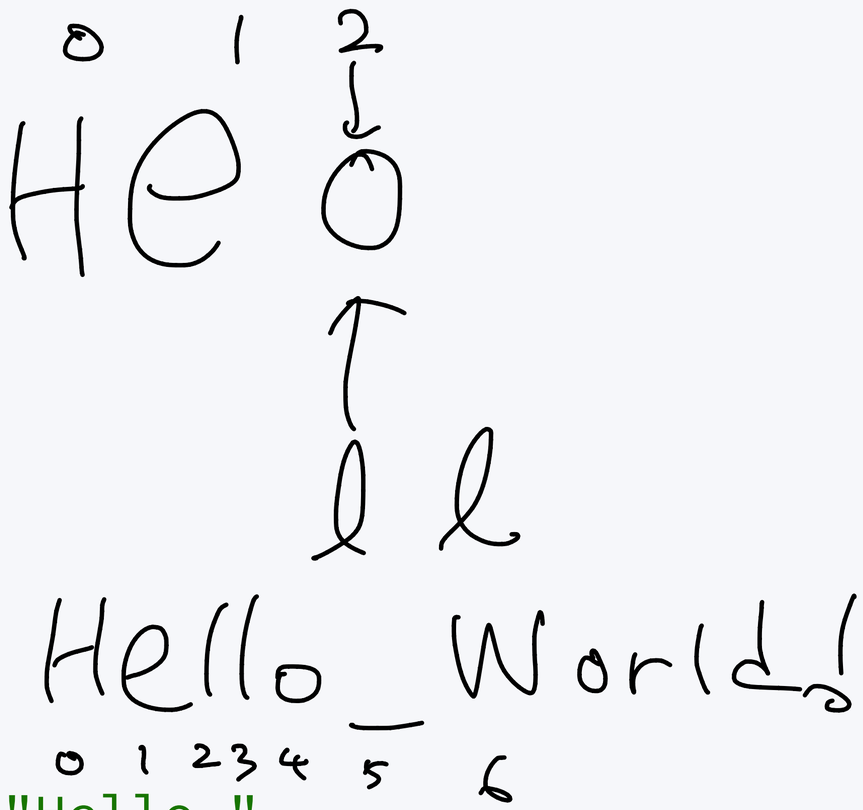
STL


```
string a = "He";
a.append(2, 'l'); // "Hell"
a.append("o").append(1, ' '); // "Hello "

string b = "";
const char *c = "World";
b.append(c); // "World"

string hello_world = a; // "Hello "
hello_world.append(b); // "Hello World"
hello_world.push_back('!'); // "Hello World!"

cout << hello_world << '\n';
```

string

STL

```
string s = "e"; // "e"

s.insert(0, "H"); // "He"

s.insert(2, "o"); // "Heo"

s.insert(2, 2, 'l').append(" "); // "Hello "

string world = "Half the World Away";

s.insert(6, world, 9, 5).push_back('!'); // "Hello World!"
```



string

STL


```
string str = "10";
int number = stoi(str);
print(str, number);

number = stoi(str, 0, 2);
print(str, number);

str = "ffff";
number = stoi(str, 0, 16);
print(str, number);
```

10

2

ffff

10000 − 1

4 3 2 1 0

$16^4 - 1 = 2^{16} - 1$

65535

string

STL


```
str = "21 Guns";
number = stoi(str);
print(str, number);

str = "3.141592";
number = stoi(str);
print(str, number);
```

21

3

string

STL


```
/*
str = "2147483648";
number = stoi(str);
print(str, number);

str = "hello";
number = stoi(str);
print(str, number);
*/
```

더하기

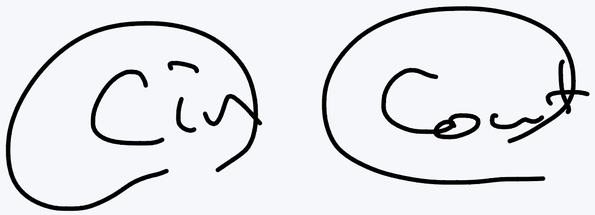
https://www.acmicpc.net/problem/10822

- https://gist.github.com/Baekjoon/c5a8983b405951c9e4a2

더하기 2

https://www.acmicpc.net/problem/10823

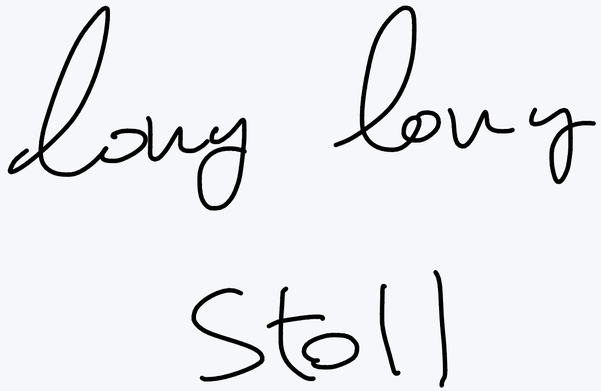
- https://gist.github.com/Baekjoon/308a504b631264363a20
- string을 표준 입출력 처럼 사용하려면 istringstream 을 사용한다



string

STL

- unsigned long: stoul
- unsigned long long: stoull
- float: stof
- double: stod
- long double: stold



string

STL


```
int n1 = 1;
int n2 = 2;

string s1 = to_string(n1);
string s2 = to_string(n2);

cout << s1 + ' ' + s2 << '\n';
```

string

STL


```
long long l1 = 2147483647;
long long l2 = 2147483647;

s1 = to_string(l1);
s2 = to_string(l2);

cout << s1 + ' ' + s2 << '\n';
```

2147483647 2147483647

string

STL


```
double d = 3.141592;
float f = 65358979.0;

s1 = to_string(d);
s2 = to_string(f);

cout << s1 + ' ' + s2 << '\n';
```

네 수

https://www.acmicpc.net/problem/10824

- https://gist.github.com/Baekjoon/88d1ecca80dd87b17dd2