

C언어 스터디

6주차

<C++ 맞보기 && 동적배열(vector) && 문자열>

CAPS

C++ 맛보기

1. C Style

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
int main(void) {
    printf("Hello World!");
}
```

2. C++ Style

```
#include<iostream>
using namespace std;
int main(void) {
    cout << "Hello World";
}
```

1. C Style

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
int main(void) {
    int a, b;
    scanf("%d %d", &a, &b);
    printf("%d", a + b);
}
```

2. C++ Style

```
#include<iostream>
using namespace std;
int main(void) {
    int a, b;
    cin >> a >> b;
    cout << a + b;
}
```

<https://www.acmicpc.net/problem/10950>

1. C Style

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
int main(void) {
    int T;
    scanf("%d", &T);
    while (T--) {
        int a, b;
        scanf("%d %d", &a, &b);
        printf("%d\n", a + b);
    }
}
```

2. C++ Style

```
#include<iostream>
using namespace std;
int main(void) {
    int T;
    cin >> T;
    while (T--) {
        int a, b;
        cin >> a >> b;
        cout << a + b << "\n";
    }
}
```

동적배열

1. C Style

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
#include<stdlib.h>
int main(void) {
    int* arr = (int*)malloc(sizeof(int) * 10);
    //printf("%d", arr[11]); error!
    arr = (int*)realloc(arr, sizeof(int) * 100);

    arr[11] = 100;
    printf("%d", arr[11]);
}
```

2. C++ Style

```
#include<iostream>
#include<vector>
using namespace std;
int main(void) {
    vector<int> v(10);
    //cout << v[11]; error!
    v.resize(100);

    v[11] = 10101;
    cout << v[11];
}
```

3. C++ Style + a

```
#include<iostream>
#include<vector>
using namespace std;
vector<int> v;
int main(void) {
    for (int i = 0; i < 10; i++) {
        int a;
        cin >> a;
        v.push_back(a);
    }
    cout << v.size() << "\n";
    for (int i = 0; i < v.size(); i++)cout << v[i] << " ";

    v.pop_back();
    v.pop_back();
    cout << v.size() << "\n";
    for (int i = 0; i < v.size(); i++)cout << v[i] << " ";
}
```

문자열

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
char arr[8]="Hello";
int main(void) {
    printf("%s\n", arr);
    for (int i = 0; i < 8; i++)printf("%c", arr[i]);
}
```

index	0	1	2	3	4	5	6	7
value	H	e	l	l	o	0	0	0

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
char arr[8]="Hello";
int main(void) {
    for (int i = 0; i < 8; i++)printf("%d ", (int)arr[i]);
}
```

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
char arr[8]="Hello";
int main(void) {
    arr[2] = 0;
    printf("%s", arr);
}
```

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
char arr[100];
int main(void) {
    scanf("%s", arr);
    printf("%s", arr);
}
```

```
#include<iostream>
#include<string>
using namespace std;
int main(void) {
    string arr;
    cin >> arr;
    cout << arr;
}
```

C++ 템플릿

```
#include<iostream>
using namespace std;
int main(void) {

}
```

Fast C++ 템플릿

```
#include<iostream>
using namespace std;
int main(void) {
    ios::sync_with_stdio(0);
    cin.tie(0);

}
```