Introduction to Programming (2)

Pointers and Dynamic Objects

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Practice Class

- Upload the report paper in e-class
  - The report paper has to include **1) the source code, 2) the snapshot, and 3) the description of the program**
  - File name is date_studentid (ex: 20220915_22xxxxx.docx)

Problem #1

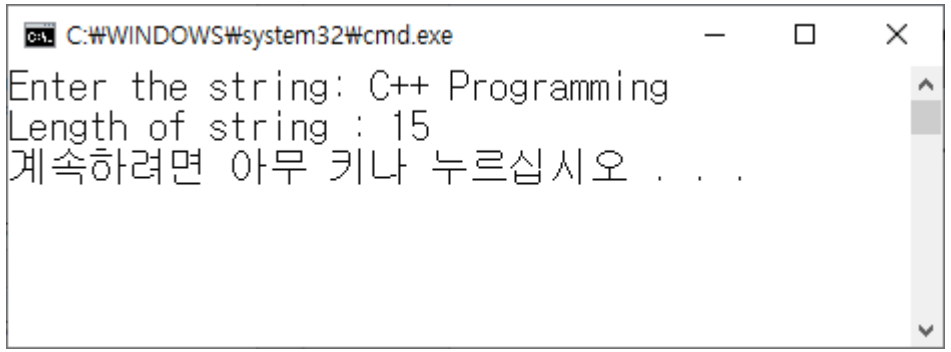
- Write a program to compute the length of the input string using pointer

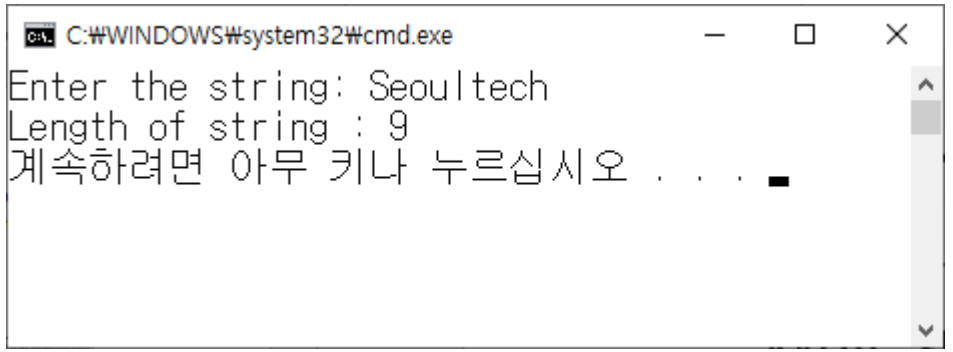
```
#include <iostream>
#define STR_MAX 100

void main() {
	char str[STR_MAX];
	char* p_str = &str[0];
	int count = 0;
	std::cout << "Enter the string: ";
	std::cin.getline(str, STR_MAX);

	while (/*To be defined*/) {
		/*To be defined*/
	}

	std::cout << "Length of string : " << count << std::endl;
}
```





Problem #2

- Complete the addition functions

```
#include <iostream>

int addition_1(int a, int b) { /*To be defined*/}
void addition_2(int a, int b, int* result) { /*To be defined*/ }
void addition_3(int a, int b, int& result) { /*To be defined*/ }
int main()
{
    int result1, result2, result3;
    result1 = addition_1(3, 4);
    addition_2(5, 6, &result2);
    addition_3(7, 8, result3);
    std::cout << result1 << std::endl;
    std::cout << result2 << std::endl;
    std::cout << result3 << std::endl;
    return 0;
}
```