



Chapter 3

Homework

Prof. Sungdeok Cha
TA. Hodong Kim
Korea University



Problem 1

- ▶ Write a program that reads two integers, and determines and prints if the first is a multiple of the second

```
Input two integers: 88 11  
88 is a multiple of 11 by a factor of 8
```

```
Input two integers: 777 5  
777 is not a multiple of 5
```



Problem 2

- ▶ Write a program that
 - (1) inputs two integers (integer1 and integer 2)
 - (2) prints sum of all integers between integer1 and integer2
 - (3) Use while() statement
- ▶ Ex) input : 10, 15 \rightarrow Sum : $10 + 11 + 12 + 13 + 14 + 15 = 75$

```
Enter two integers : 10 15  
The sum of all integers between 10 and 15 is 75
```



Problem 3

- ▶ Write a program that reads a nonnegative integer, and computes and prints its factorial
(For example, $5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$)

```
Enter a positive integer: 5  
5! is 120
```

```
Enter a positive integer: 9  
9! is 362880
```

```
Enter a positive integer: -8  
Enter a positive integer: 0  
0! is 1
```



Problem 4

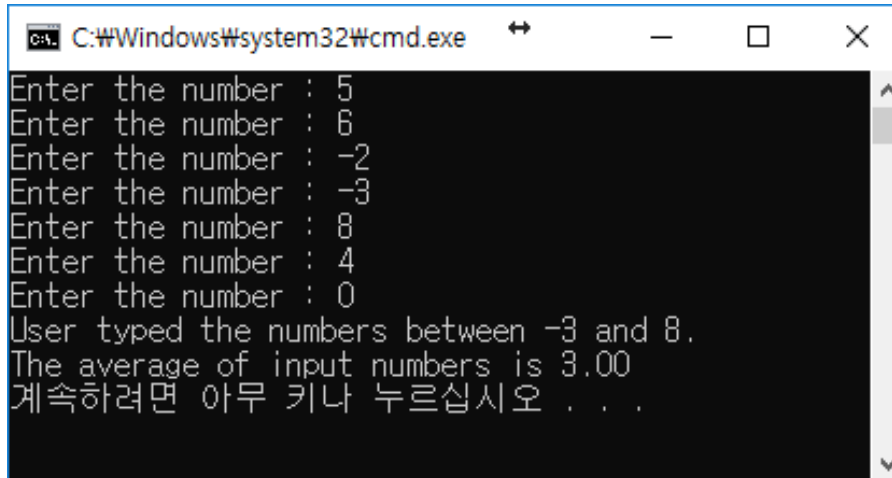
- ▶ Write a program that reads an integer, and determines and prints how many digits in the integer are 7s

```
Enter a 5-digit number: 17737  
The number 17737 has 3 seven(s) in it
```

```
Enter a 5-digit number: 11727  
The number 11727 has 2 seven(s) in it
```

Problem 5

- ▶ Write a program that reads integers repeatedly and terminates when it reads 0
- ▶ The program should display below information
 - The range of input numbers
 - The average of input numbers (with 2 digits after the decimal point)



```
C:\Windows\system32\cmd.exe
Enter the number : 5
Enter the number : 6
Enter the number : -2
Enter the number : -3
Enter the number : 8
Enter the number : 4
Enter the number : 0
User typed the numbers between -3 and 8.
The average of input numbers is 3.00
계속하려면 아무 키나 누르십시오 . . .
```

[*Caution*: Do not contain a *zero-input* to calculate the average value.]



Homework-2

- ▶ Submit a file “2018123456_HW02.zip”
 - Source File
 - 1.c, ..., 5.c
 - Capture File
 - 1.png, ... , 5.png
- ▶ Blackboard(kulms.korea.ac.kr)
→ 과제
- ▶ Due Date : 2018/03/27 23:59

