

Introduction to Programming (2)

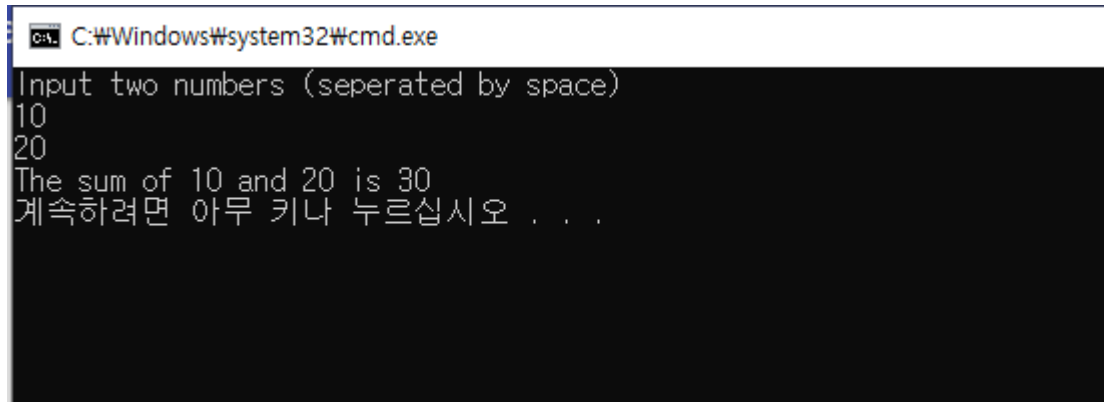
C++ Basics - 1

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

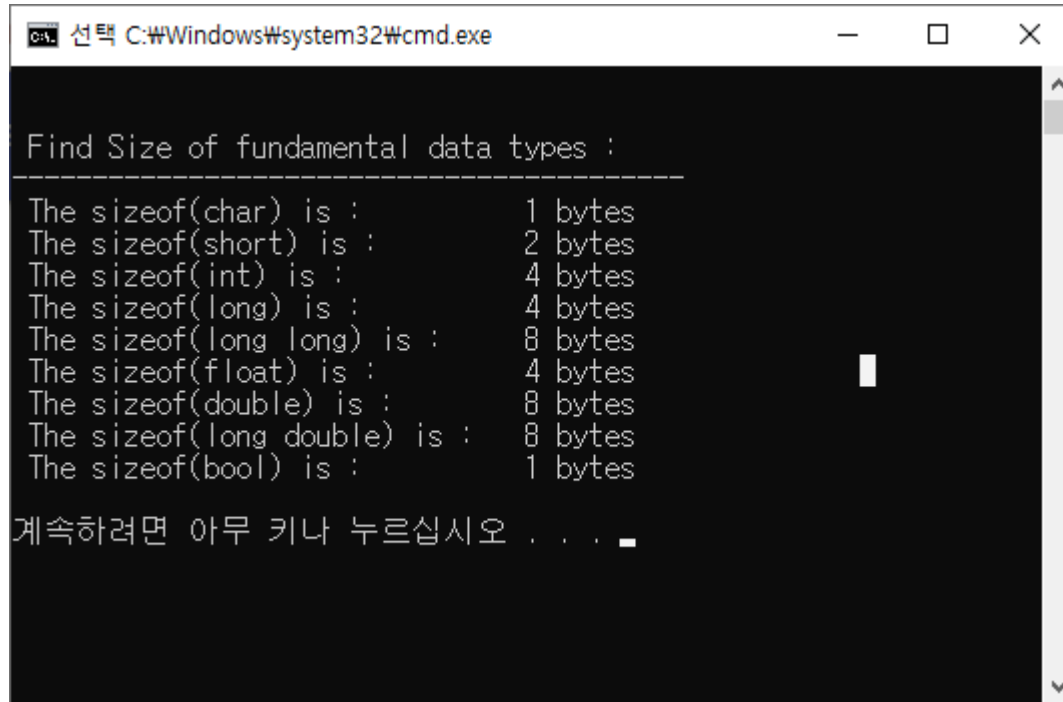
- Get two numbers and print the sum of two numbers
- Sample output



```
C:\Windows\system32\cmd.exe
Input two numbers (seperated by space)
10
20
The sum of 10 and 20 is 30
계속하려면 아무 키나 누르십시오 . . .
```

Problem #2

- Find size of fundamental data types.
- Sample output



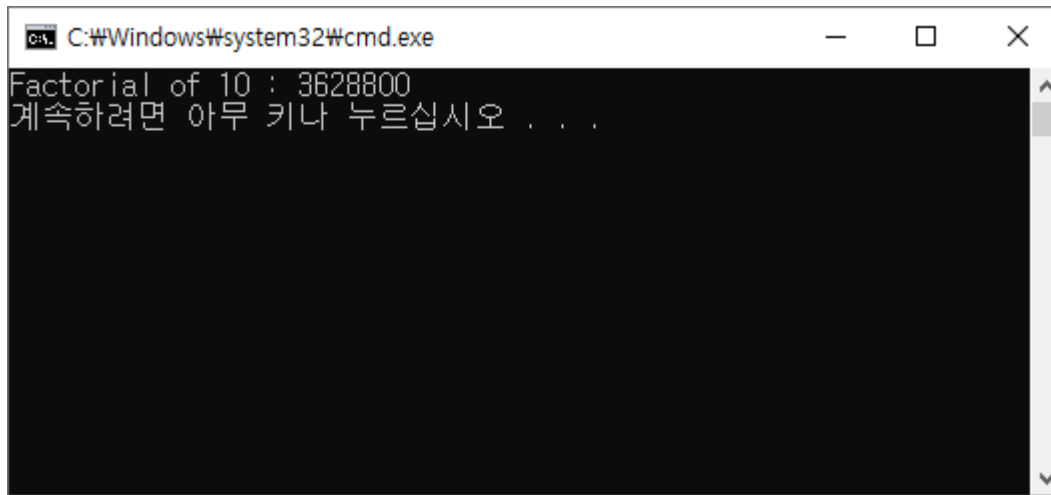
```
C:\Windows\system32\cmd.exe

Find Size of fundamental data types :
-----
The sizeof(char) is :      1 bytes
The sizeof(short) is :    2 bytes
The sizeof(int) is :      4 bytes
The sizeof(long) is :     4 bytes
The sizeof(long long) is : 8 bytes
The sizeof(float) is :    4 bytes
The sizeof(double) is :   8 bytes
The sizeof(long double) is : 8 bytes
The sizeof(bool) is :     1 bytes

계속하려면 아무 키나 누르십시오 . . .
```

Problem #3

- Print the factorial of 10 (10!)
 - Problem #3-1 : use for loop
 - Problem #3-2 : use while loop



A screenshot of a Windows command prompt window. The title bar shows "C:\Windows\system32\cmd.exe". The command prompt displays the text "Factorial of 10 : 3628800" followed by a Korean message "계속하려면 아무 키나 누르십시오 . . ." (Press any key to continue).

Problem #4

- Get the age of A and B, then determine the older one
- Sample output

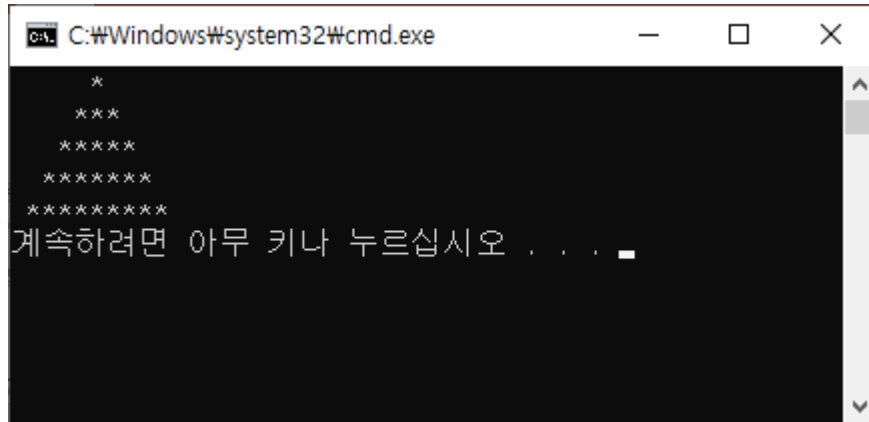
```
C:\Windows\system32\cmd.exe
Input an age of A: 21
Input an age of B: 20
A is older than B
계속하려면 아무 키나 누르십시오 . . .
```

```
C:\Windows\system32\cmd.exe
Input an age of A: 20
Input an age of B: 21
B is older than A
계속하려면 아무 키나 누르십시오 . . .
```

```
C:\Windows\system32\cmd.exe
Input an age of A: 20
Input an age of B: 20
A and B are the same age
계속하려면 아무 키나 누르십시오 . . .
```

Problem #5

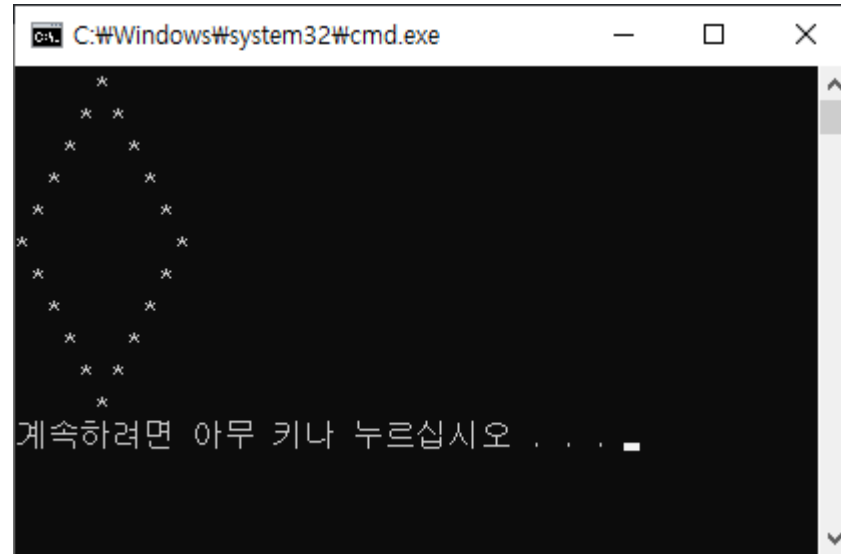
- Draw following patterns by using while loop
- Problem #5-1



```
C:\Windows\system32\cmd.exe

*
***
*****
*****
*****
*****
계속하려면 아무 키나 누르십시오 . . .
```

Problem #5-2



```
C:\Windows\system32\cmd.exe

*
* *
* * *
* * *
* * *
* * *
* * *
* * *
* * *
* * *
* * *
* * *
계속하려면 아무 키나 누르십시오 . . .
```