

# C Programming

## Practice 1

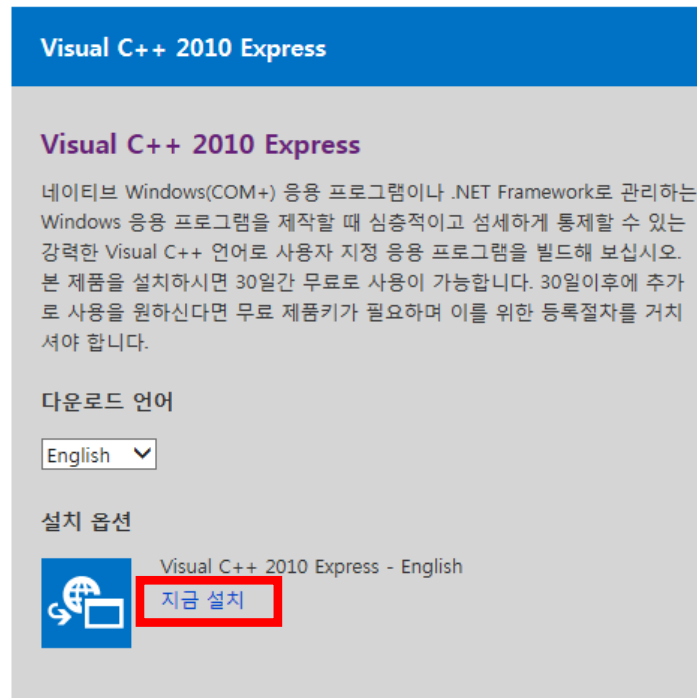
# Introduction

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- Human-Computer Interaction Laboratory
  - 산학기술관 711호(R&D building 711)

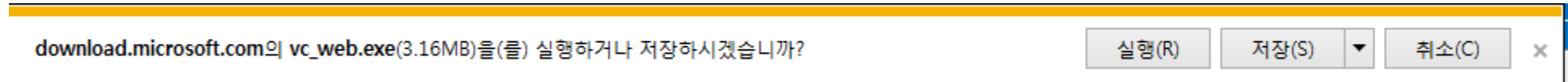
# How to use Visual Studio

- <http://www.visualstudio.com/downloads/download-visual-studio-vs>

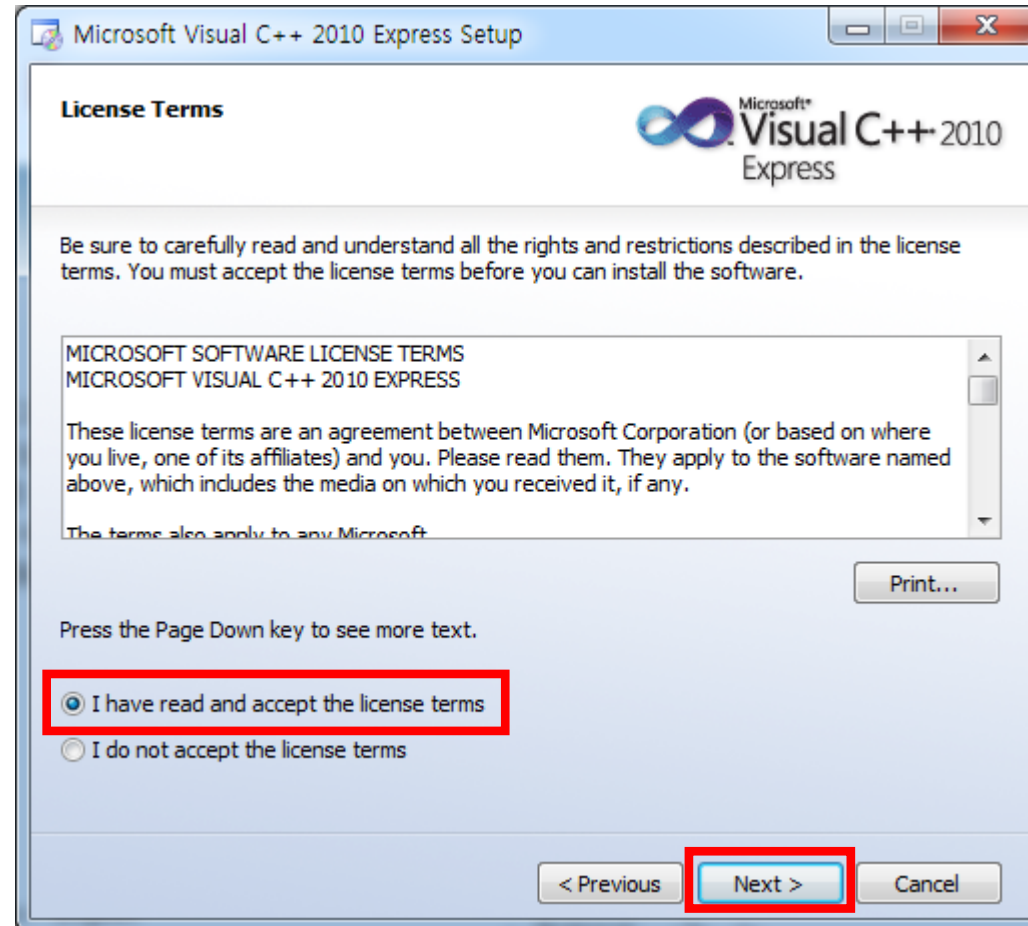
## Visual Studio 2010 Express



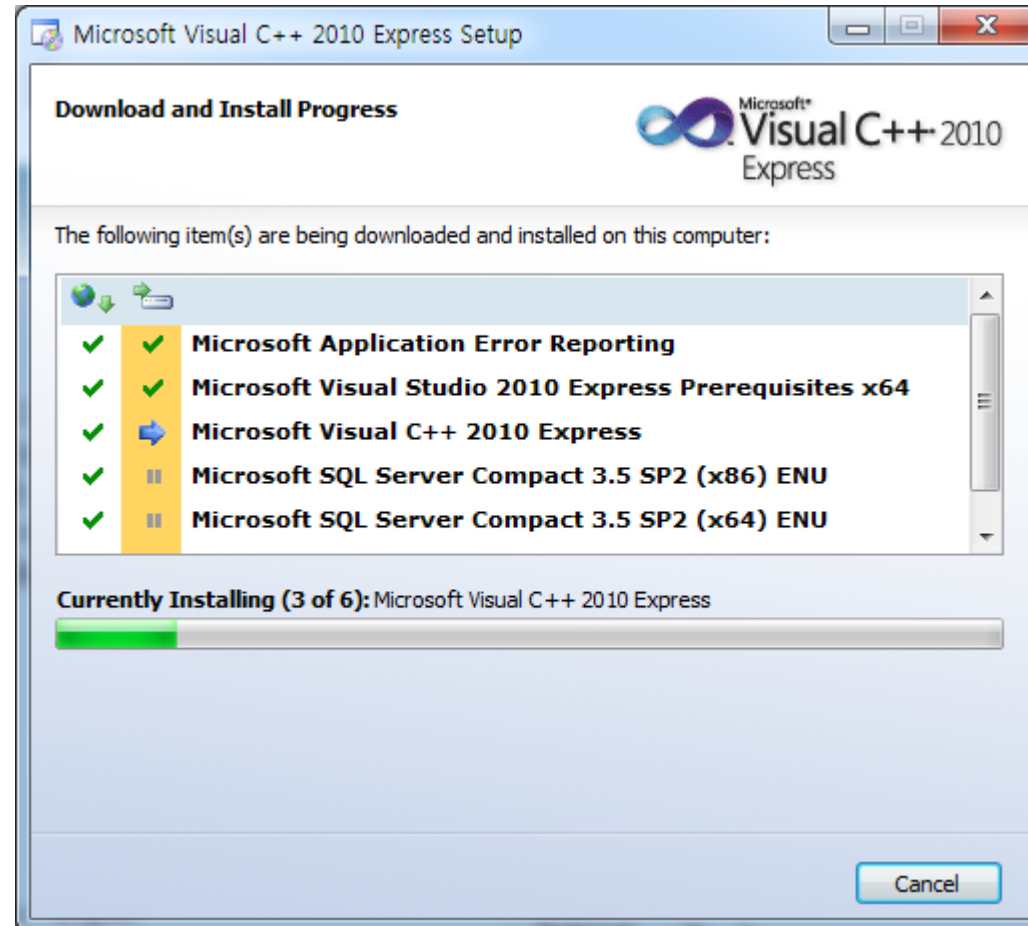
# How to use Visual Studio



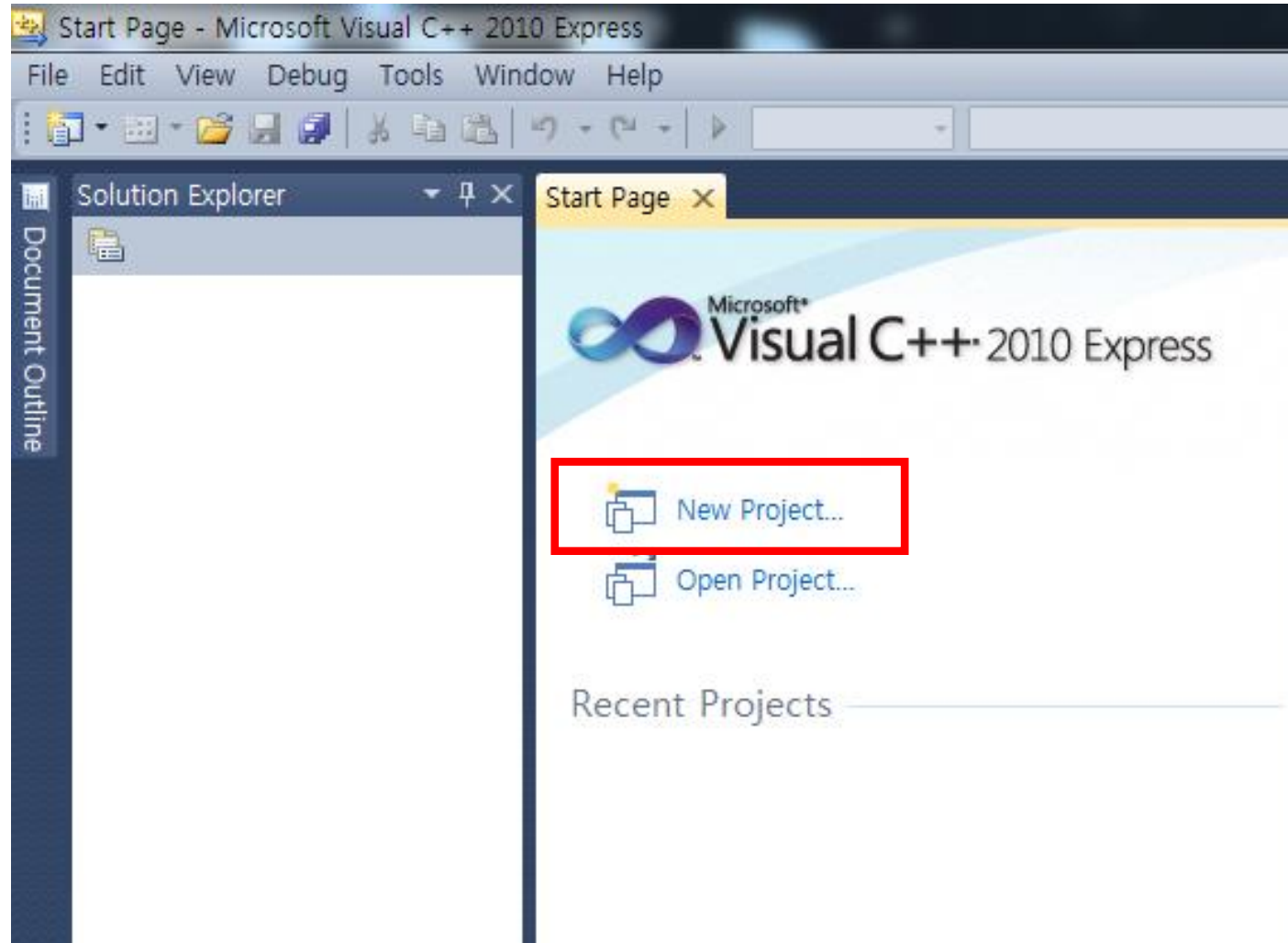
# How to use Visual Studio



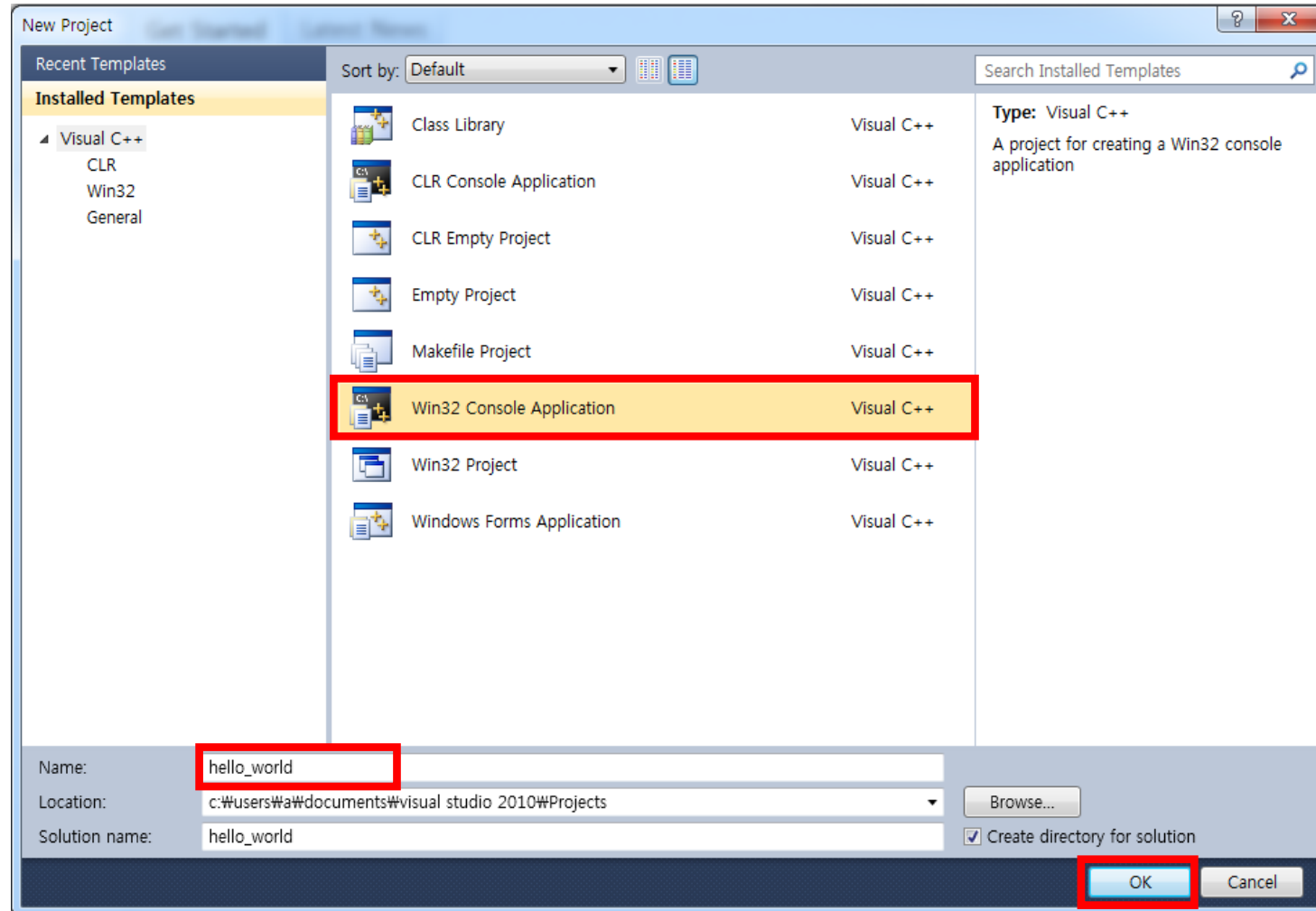
# How to use Visual Studio



# Create the new project

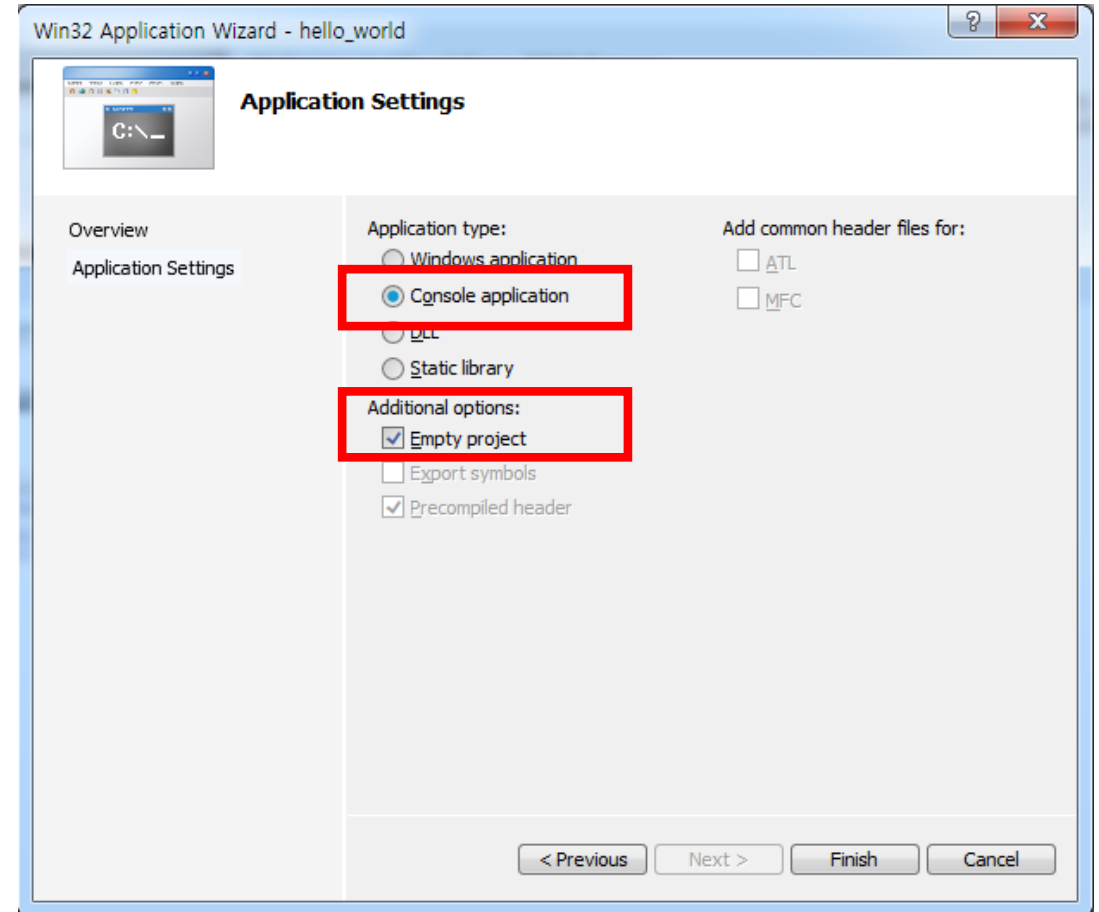
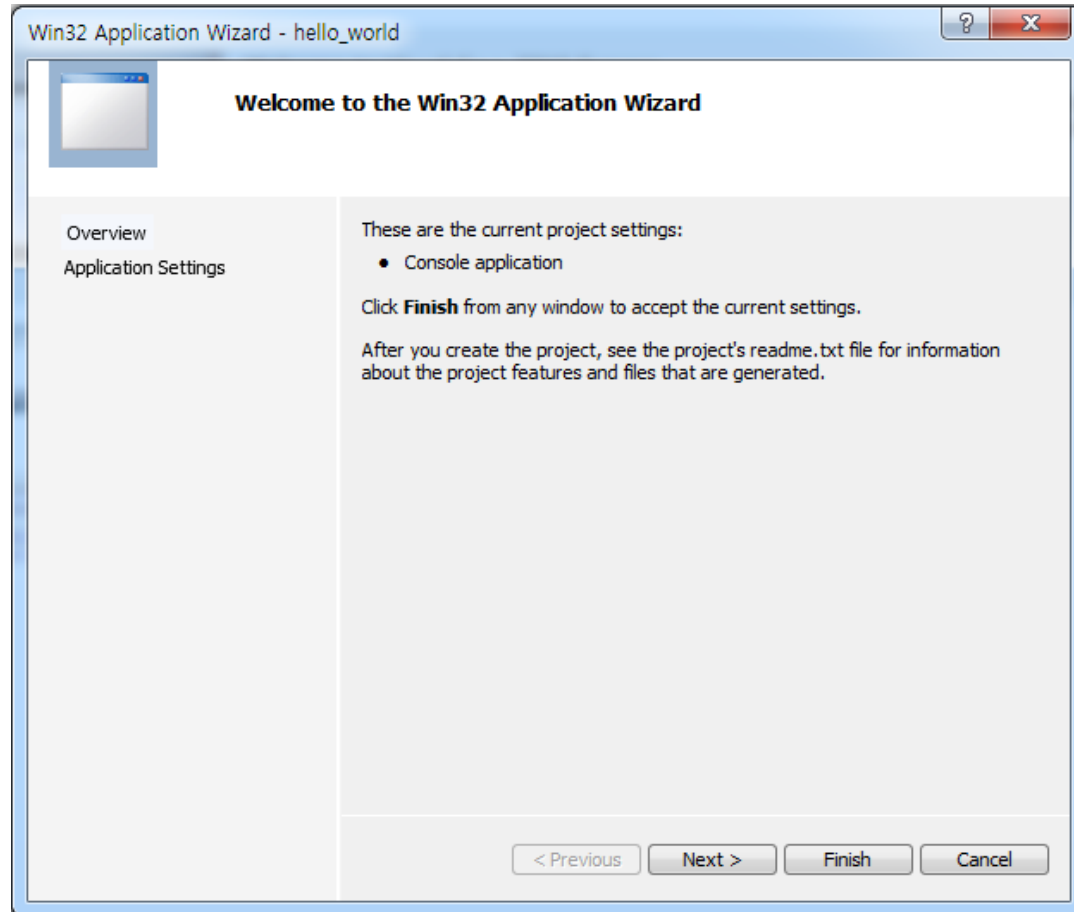


# Create the new project

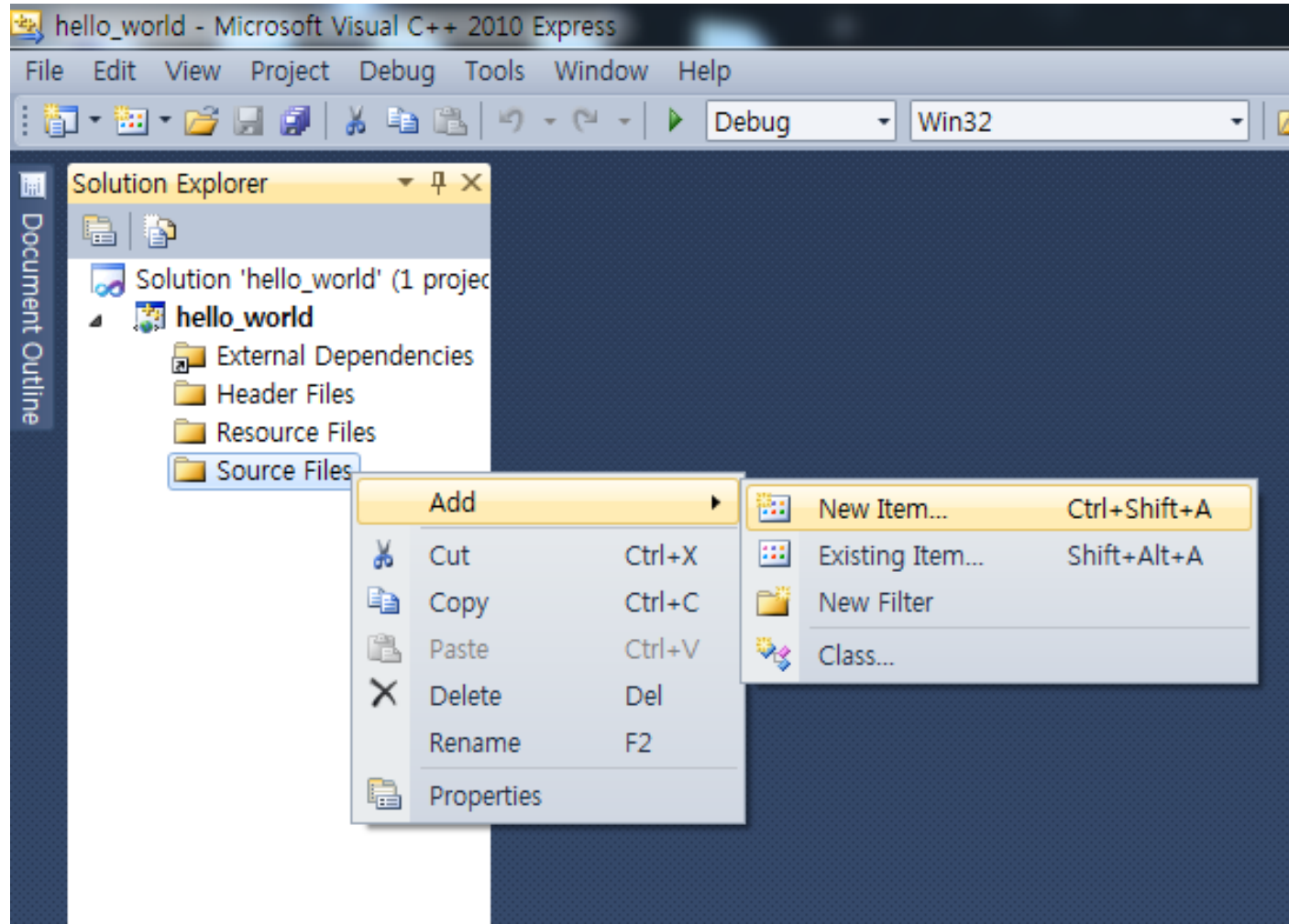




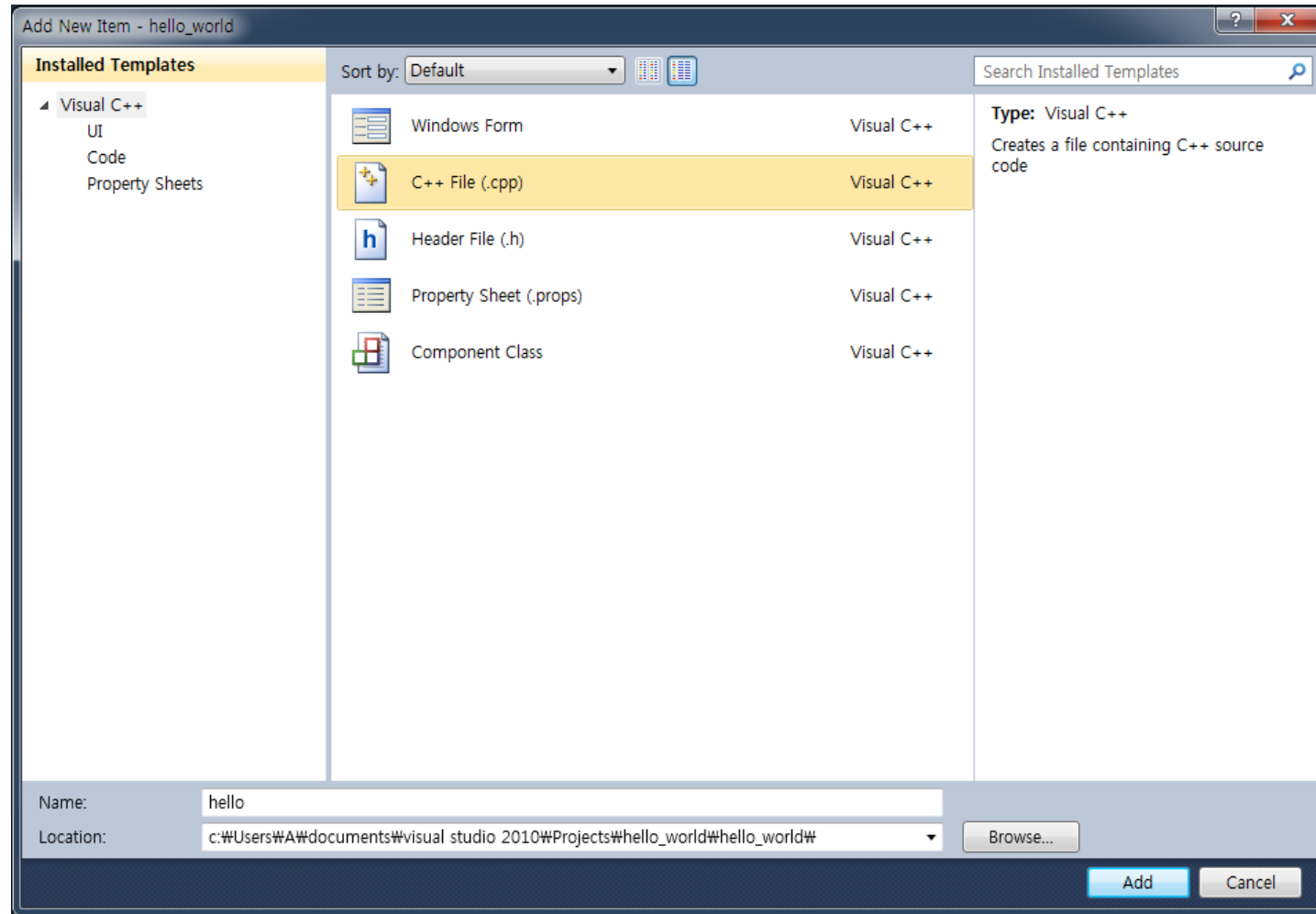
# Create the new project



# Create the source file



# Create the source file



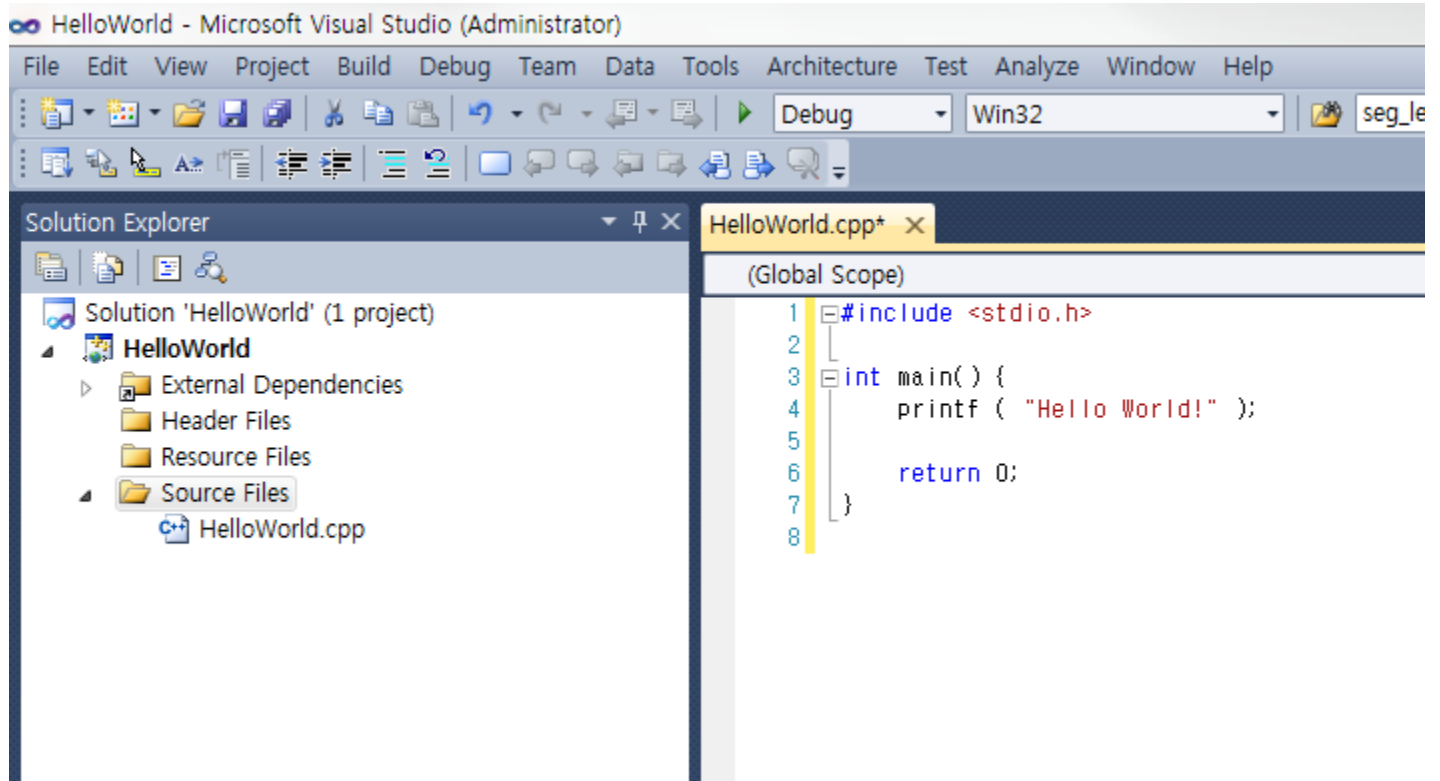
# Hello World source code

```
#include <stdio.h>
```

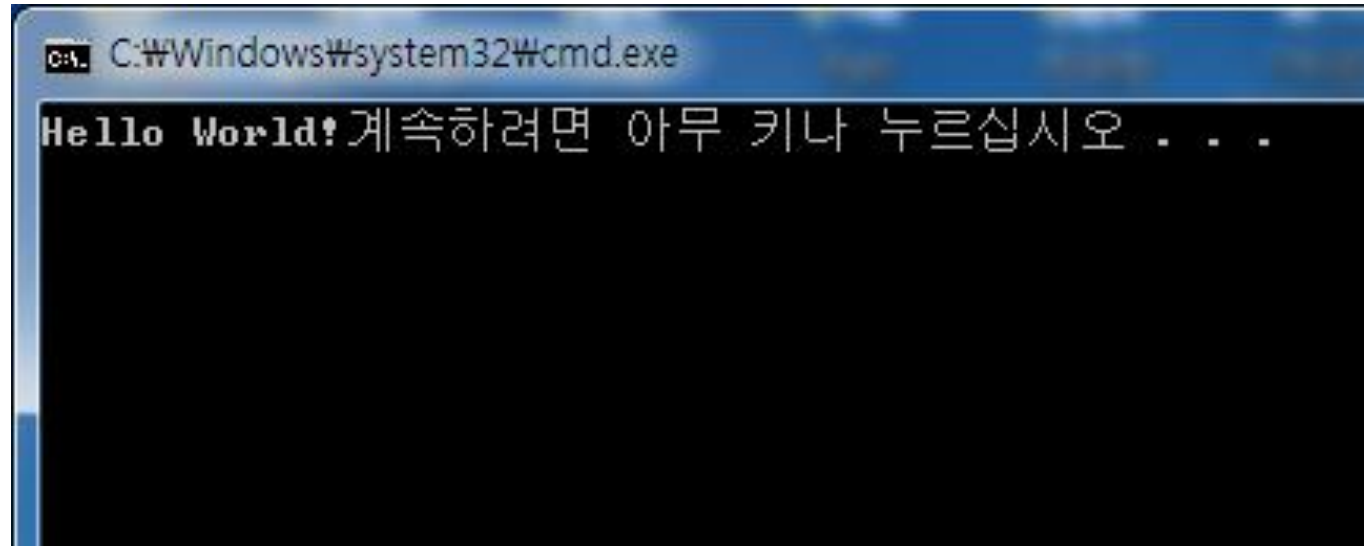
```
int main() {  
    printf("Hello World!");  
    return 0;  
}
```

# How to use Visual Studio

- Compile : ctrl + F7
- Build : F7
- Execute : ctrl + F5



# Hello World program result



```
C:\Windows\system32\cmd.exe
Hello World! 계속하려면 아무 키나 누르십시오 . . .
```

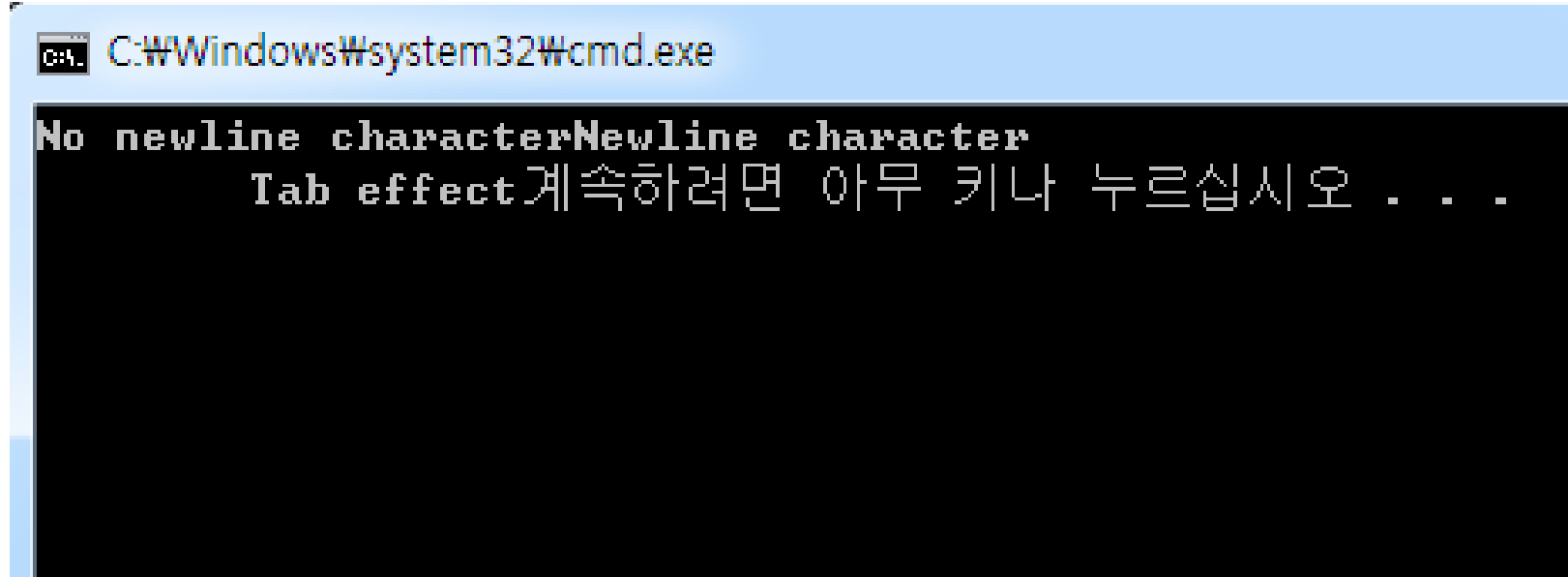
A screenshot of a Windows command prompt window. The title bar at the top is blue and contains the text "C:\Windows\system32\cmd.exe". The main area of the window is black with white text. The first line of text is "Hello World! 계속하려면 아무 키나 누르십시오 . . .". The text is in a monospaced font. The window has a standard Windows XP-style border.

# Printf function new-line character

```
#include <stdio.h>
```

```
int main() {  
    printf("No newline character");  
    printf("Newline character\n");  
    printf("\tTab effect");  
    return 0;  
}
```

# new-line program result



```
C:\Windows\system32\cmd.exe
No newline characterNewline character
Tab effect계속하려면 아무 키나 누르십시오 . . .
```



# comments

- How to comment in c language
  1. `//hello?`
  2. `/*hello*/`
- When you submit assignments, write the comment about the program.

# printf

## ► Output format character

Format character	Output type
<b>%d, %i</b>	<b>decimal integer</b>
%x, %o	Hexadecimal integer, Octal integer
<b>%f, %lf</b>	<b>Float type real number/double type real number</b>
<b>%c</b>	<b>A character</b>
<b>%s</b>	<b>String</b>
%u	Decimal integer(positive only)
%%	% symbol

## ► Ex)

- `int a = 3;`
- `printf ( "%d", a );`

# scanf

## ▶ input format character

Format character	Input type
<b>%d</b>	<b>decimal integer</b>
%x, %o	Hexadecimal integer, Octal integer
<b>%f, %lf</b>	<b>Float type real number/double type real number</b>
<b>%c</b>	<b>A character</b>
<b>%s</b>	<b>String</b>
%u	Decimal integer(positive only)

## ▶ Ex)

▶ int a;

▶ scanf ( "%d", &a ); <& : address operator>

# While statement structure

```
int i = 0; // variable for while statement.
```

```
while( i < 10 ) // i < 10 is a conditional sentence.
```

```
{
```

```
    printf("%d",i); // print the i value.
```

```
    i = i + 1; // change the i value.
```

```
}
```

# Homework 1 - Calendar

- In the following format, print September calendar (2015. 9)

Mon	Tue	Wed	Thr	Fri	Sat	Sun
※	※	※	※	※	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	※	※	※	※	※	※

# Homework 2 - Multiplication table

- Input a number and print the multiplication table of the number
- Use the while statement

Input number:

7

\*\*\*\*\*7\*\*\*\*\*

7\*1 = 7

7\*2 = 14

7\*3 = 21

7\*4 = 28

7\*5 = 35

7\*6 = 42

7\*7 = 49

7\*8 = 56

7\*9 = 63

\*\*\*\*\*

# Homework form

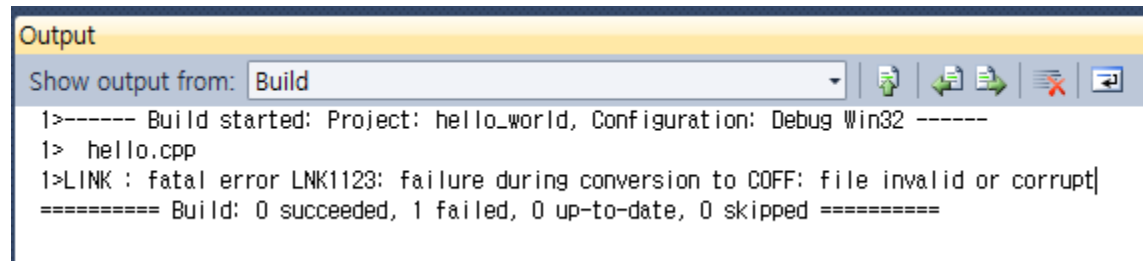
- Homework submission e-mail:

[hizorro99@naver.com](mailto:hizorro99@naver.com)

- E-mail title: day(Thursday or Friday)\_name\_#week
  - Ex) Friday\_james\_week2
  - Ex) 금요일반\_장원철\_2주차
- File title: student id\_name\_week#\_1.c
  - Ex) 2014123456\_james\_week2\_1.c (or .cpp)
  - Ex) 2014123456\_james\_week2\_2.c (or .cpp)

# 예외

- 이러한 오류가 뜨는 경우



The screenshot shows the 'Output' window in a development environment. The 'Show output from:' dropdown is set to 'Build'. The output text is as follows:

```
1>----- Build started: Project: hello_world, Configuration: Debug Win32 -----  
1> hello.cpp  
1>LINK : fatal error LNK1123: failure during conversion to COFF: file invalid or corrupt|  
===== Build: 0 succeeded, 1 failed, 0 up-to-date, 0 skipped =====
```



