

“Dragon Realm”

Using Bloodshed Dev-C++

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Introduction

■ The “Dragon Realm” Game

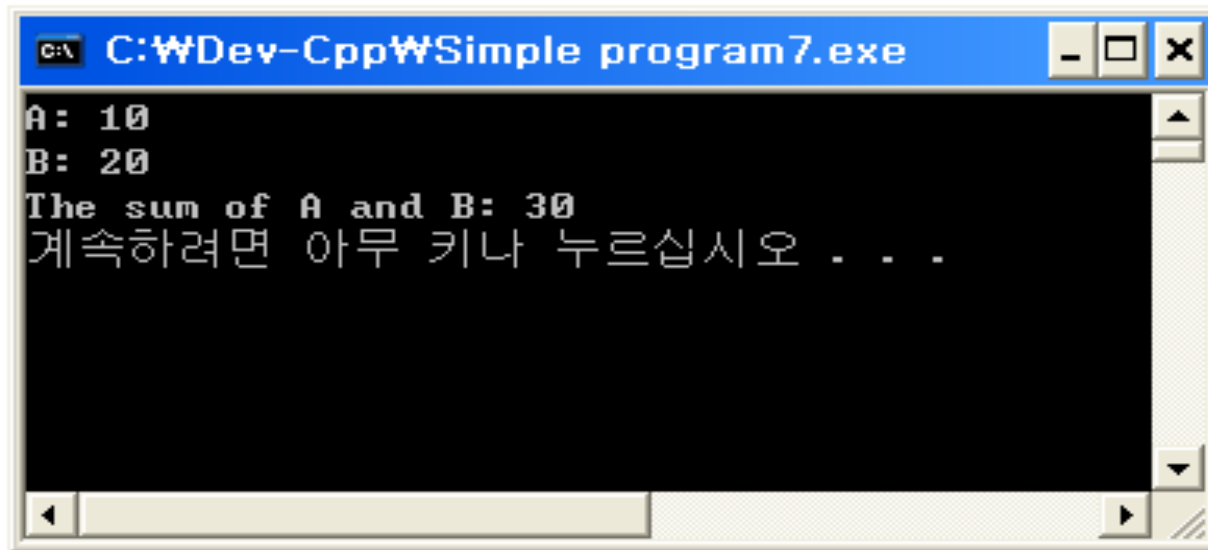
- Simple program 1
- User defined function
- Simple program 2
- `strcmp()` function
- Simple program 3
- `Sleep()` function

■ The “Dragon Realm” Game with Dev-C++

A Simple Example of Dev-C++

■ Simple program1

- User defined function



The screenshot shows a console window titled "C:\WDev-Cpp\Simple program7.exe". The window has a blue title bar and standard Windows window controls (minimize, maximize, close). The console output is as follows:

```
A: 10  
B: 20  
The sum of A and B: 30  
계속하려면 아무 키나 누르십시오 . . .
```

The text is displayed in a monospaced font. The first three lines are in English, and the last line is in Korean, indicating a pause in the program execution.

A Simple Example of Dev-C++

■ Simple program1

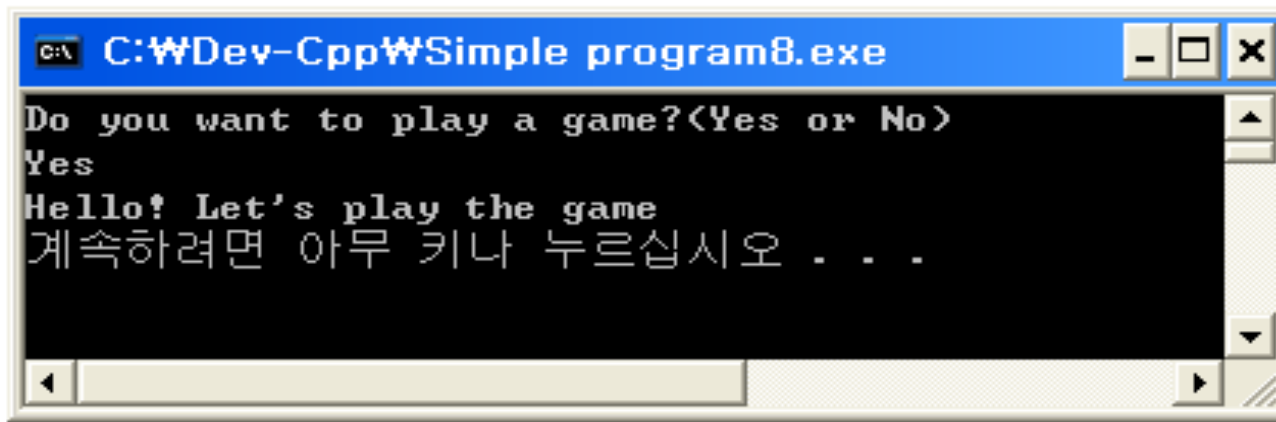
- Source code

```
/* Simple program(7) */  
  
#include <stdio.h>  
#include <stdlib.h>  
  
int sum(int a, int b);  
  
int main(void) {  
    int a = 10, b = 20;  
    sum(a, b);  
  
    system("PAUSE");  
    return 0;  
}  
  
int sum(int a, int b) {  
    printf("A: %d\n", a);  
    printf("B: %d\n", b);  
    printf("The sum of A and B: %d\n", a+b);  
}
```

A Simple Example of Dev-C++

■ Simple program2

- `strcmp ()` function



```
C:\WDev-Cpp\Simple program8.exe
Do you want to play a game?<Yes or No>
Yes
Hello! Let's play the game
계속하려면 아무 키나 누르십시오 . . .
```

A Simple Example of Dev-C++

■ Simple program2

- Source code

```
/* Simple program(8) */  
  
#include <stdio.h>  
#include <stdlib.h>  
#include <string.h>  
  
int main(void) {  
  
    char str[5];  
  
    printf("Do you want to play a game?(Yes or No) \n");  
    scanf("%s", str);  
  
    if(strcmp(str, "Yes") == 0)  
        printf("Hello! Let's play the game\n");  
  
    else if(strcmp(str, "No") == 0)  
        printf("Good bye!\n");  
  
    system("PAUSE");  
    return 0;  
}
```

A Simple Example of Dev-C++

■ Simple program2

- **strcmp () function**
- Compare characters of two strings .
- Return Value
 - if Return value if < 0 then it indicates **S1 is less than S2**
 - if Return value if > 0 then it indicates **S1 is greater than S2**
 - if Return value if $= 0$ then it indicates **S1 is equal to S2**

A Simple Example of Dev-C++

■ Simple program2

- Logical operators in c

Operator name	Python syntax	C syntax
Logical AND	a and b	a && b
Logical OR	a or b	a b

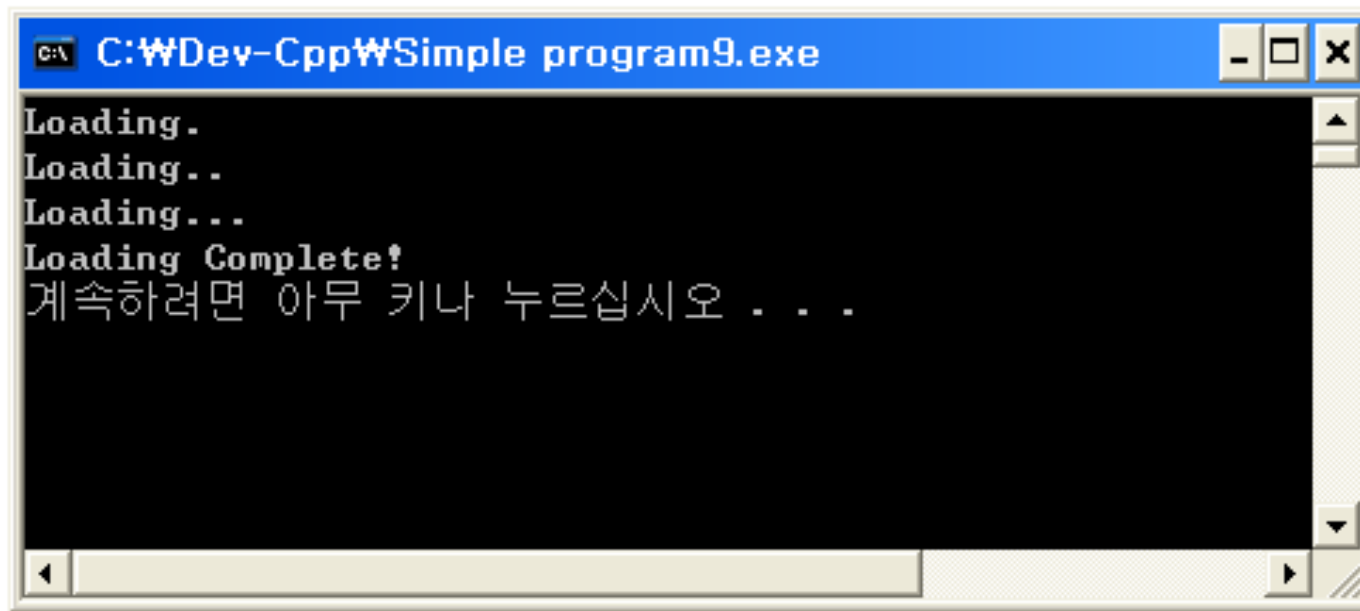
- example

```
if(strcmp(str, "Yes") == 0 || strcmp(str, "Y") == 0)
    printf("Hello! Let's play the game\n");
```


A Simple Example of Dev-C++

■ Simple program3

- **sleep ()** function



```
C:\WDev-Cpp\Simple program9.exe
Loading.
Loading..
Loading...
Loading Complete!
계속하려면 아무 키나 누르십시오 . . .
```

A Simple Example of Dev-C++

■ Simple program3

- **Sleep() function**
- Suspend execution for an interval of time.
- The time interval for which execution is to be suspended, in milliseconds.
- **example**

```
#include <windows.h>

int main(void){
    Sleep(2000);
    .....
```

- number is in milliseconds 2Sec = 2000 Milliseconds.

A Simple Example of Dev-C++

■ Simple program3

- Source code

```
/* Simple program(9) */  
  
#include <stdio.h>  
#include <stdlib.h>  
#include <windows.h>  
  
int main(void) {  
  
    printf("Loading.\n");  
    Sleep(3000);  
    printf("Loading..\n");  
    Sleep(2000);  
    printf("Loading...\n");  
    Sleep(1000);  
    printf("Loading Complete!\n");  
  
    system("PAUSE");  
    return 0;  
}
```

The “Dragon Realm” Game with Dev-C++



■ Python program “Dragon Realm”

```
C:\Dev-Cpp\Dragon.exe
You are in a land full of dragons. In front of you,
you see two caves. In one cave, the dragon is friendly
and will share his treasure with you. The other dragon
is greedy and hungry, and will eat you on sight.

Which cave will you go into? <1 or 2>
1
You approach the cave...
It is dark and spooky...
A large dragon jumps out in front of you! He opens his jaws and...

Gobbles you down in one bite!
Do you want to play again? <yes or no>
no
```

The “Dragon Realm” Game with Dev-C++

- Python source code

```
import random
import time
```

- Dev-C++ source code

```
#include <stdio.h>
#include <stdlib.h>
#include <windows.h>
#include <string.h>
#include <time.h>

int displayIntro(void);
int chooseCave(void);
int checkCave(int chooseCave);
```

The “Dragon Realm” Game with Dev-C++

- Python source code

```
def displayIntro():  
    print 'You are in a land full of dragons. In front of you,'  
    print 'you see two caves. In one cave, the dragon is friendly'  
    print 'and will share his treasure with you. The other dragon'  
    print 'is greedy and hungry, and will eat you on sight.'  
    print
```

- Dev-C++ source code

```
int displayIntro(void) {  
    printf("You are in a land full of dragons. In front of you,\n");  
    printf("you see two caves. In one cave, the dragon is friendly\n");  
    printf("and will share his treasure with you. The other dragon\n");  
    printf("is greedy and hungry, and will eat you on sight.\n\n");  
}
```

The “Dragon Realm” Game with Dev-C++

- Python source code

```
def chooseCave():  
    cave = ''  
    while cave != '1' and cave != '2':  
        print 'Which cave will you go into? (1 or 2)'  
        cave = raw_input()  
  
    return cave
```

- Dev-C++ source code

```
int chooseCave(void) {  
    int cave;  
    cave = 0;  
  
    while (cave != 1 && cave != 2) {  
        printf("Which cave will you go into? (1 or 2)\n");  
        scanf("%d", &cave);  
  
        return cave;  
    }  
}
```

The “Dragon Realm” Game with Dev-C++

- Python source code

```
def checkCave(chosenCave):  
    print 'You approach the cave...'  
    time.sleep(2)  
    print 'It is dark and spooky...'  
    time.sleep(2)  
    print 'A large dragon jumps out in front of you! He opens his jaws and...'  
    print  
    time.sleep(2)
```

- Dev-C++ source code

```
int checkCave(int chooseCave){  
    int friendlyCave;  
  
    printf("You approach the cave...\n");  
    Sleep(2000);  
    printf("It is dark and spooky...\n");  
    Sleep(2000);  
    printf("A large dragon jumps out in front of you! He opens his jaws and...\n\n");  
    Sleep(2000);  
}
```


The “Dragon Realm” Game with Dev-C++

- Python source code

```
friendlyCave = random.randint(1, 2)

if chosenCave == str(friendlyCave):
    print 'Gives you his treasure!'
else:
    print 'Gobbles you down in one bite!'
```

- Dev-C++ source code

```
srand(time(NULL));
friendlyCave=(rand()%2)+1;

if(chooseCave == friendlyCave)
    printf("Gives you his treasure!\n");

else
    printf("Gobbles you down in one bite!\n");
}
```

The “Dragon Realm” Game with Dev-C++

- Python source code

```
playAgain = 'yes'
while playAgain == 'yes' or playAgain == 'y':

    displayIntro()
    caveNumber = chooseCave()
    checkCave(caveNumber)

    print 'Do you want to play again? (yes or no)'
    playAgain = raw_input()
```

- Dev-C++ source code

```
int main(void) {
    char playAgain[5] = "yes";
    int caveNumber;

    while(strcmp(playAgain, "yes") == 0 || (strcmp(playAgain, "y") == 0)) {
        displayIntro();
        caveNumber = chooseCave();
        checkCave(caveNumber);

        printf("Do you want to play again? (yes or no)\n");
        scanf("%s", playAgain);
    }
    system("PAUSE");
    return 0;
}
```

The “Dragon Realm” Game with Dev-C++

- **Dev-C++ source code (1/3)**

```
/* Dragon Realm */

#include <stdio.h>
#include <stdlib.h>
#include <windows.h>
#include <string.h>
#include <time.h>

int displayIntro(void);
int chooseCave(void);
int checkCave(int chooseCave);

int main(void) {
    char playAgain[5] = "yes";
    int caveNumber;

    while(strcmp(playAgain, "yes") == 0 || (strcmp(playAgain, "y") == 0)) {
        displayIntro();
        caveNumber = chooseCave();
        checkCave(caveNumber);

        printf("Do you want to play again? (yes or no)\n");
        scanf("%s", playAgain);
    }
    system("PAUSE");
    return 0;
}
```

The “Dragon Realm” Game with Dev-C++

- Dev-C++ source code (2/3)

```
int displayIntro(void) {
    printf("You are in a land full of dragons. In front of you,\n");
    printf("you see two caves. In one cave, the dragon is friendly\n");
    printf("and will share his treasure with you. The other dragon\n");
    printf("is greedy and hungry, and will eat you on sight.\n\n");
}

int chooseCave(void) {
    int cave;
    cave = 0;

    while (cave != 1 && cave != 2) {
        printf("Which cave will you go into? (1 or 2)\n");
        scanf("%d", &cave);
    }

    return cave;
}
```

The “Dragon Realm” Game with Dev-C++

- Dev-C++ source code (3/3)

```
int checkCave(int chooseCave) {
    int friendlyCave;

    printf("You approach the cave...\n");
    Sleep(2000);
    printf("It is dark and spooky...\n");
    Sleep(2000);
    printf("A large dragon jumps out in front of you! He opens his jaws and...\n\n");
    Sleep(2000);

    srand(time(NULL));
    friendlyCave=(rand()%2)+1;

    if(chooseCave == friendlyCave)
        printf("Gives you his treasure!\n");

    else
        printf("Gobbles you down in one bite!\n");
}
```