20164389 멀티미디어공학과 박

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```
short           student[9];
```


short형
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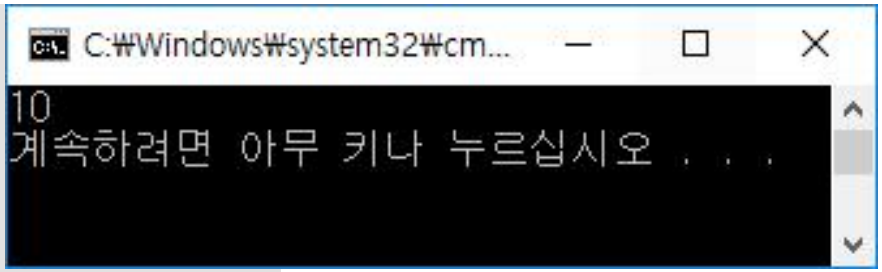
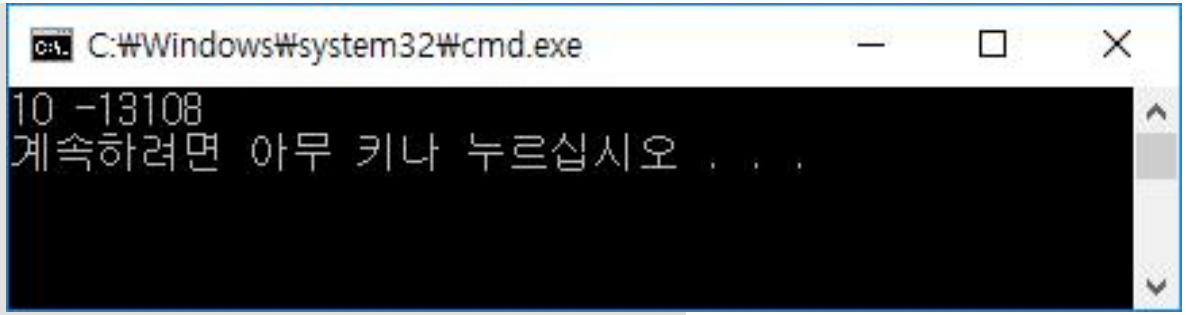
short형

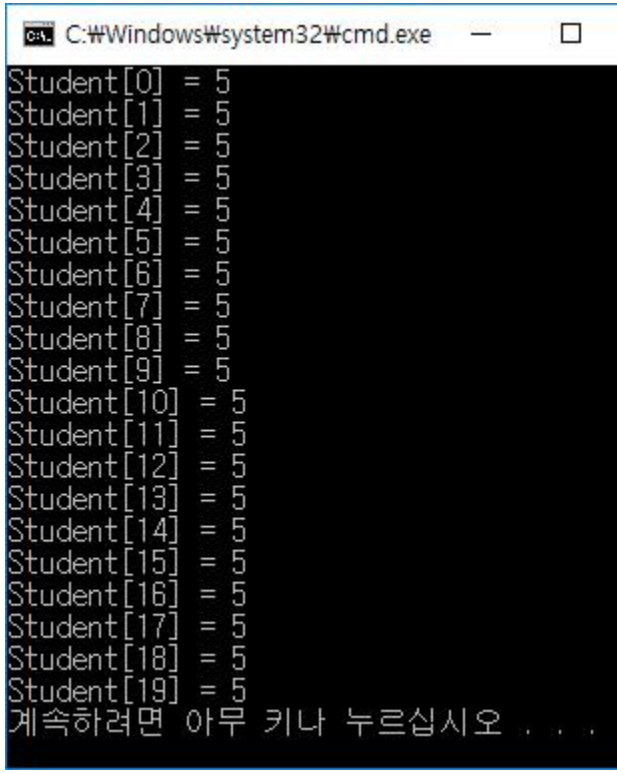
```c
#include <stdio.h>

void main()
{
    short student[20];

    student[1] = 10;
    printf("%d₩n", student[1]);
}
```



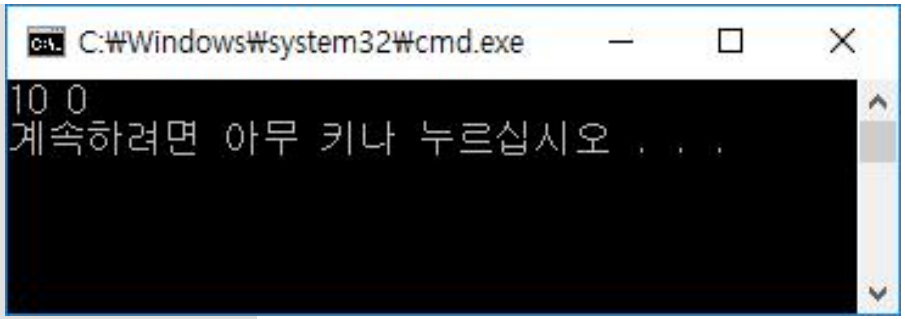
```c
#include <stdio.h>

void main()
{
    short student[20];
    student[1] = 10;
    printf("%d %d₩n", student[1], student[2]);
}
```



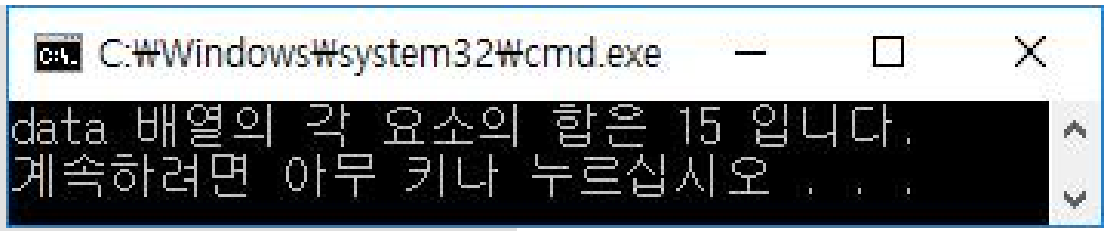
```
clude <stdio.h>

d main()

 short student[20];
 for (int i = 0; i < 20; i++) student[i] = 5;

 for (int i = 0; i < 20; i++) printf("Student[%d] = %d₩n", i, student[i]);
```



```c
#include <stdio.h>

void main()
{
    short student[20] = {0,};
    student[1] = 10;
    printf("%d %d₩n", student[1], student[2]);
}
```

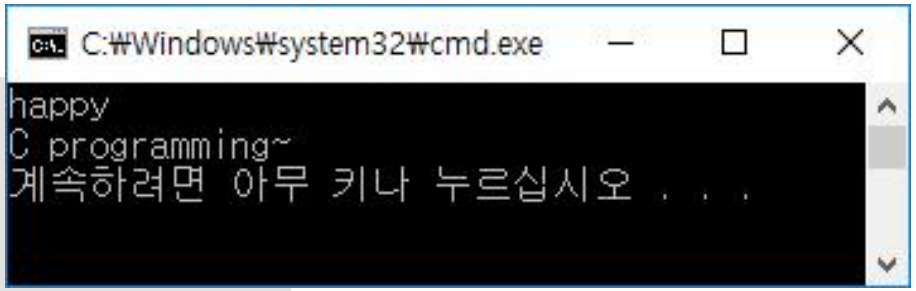


```c
#include <stdio.h>

void main()
{
    char data[5] = { 1,2,3,4,5, };
    int result = 0, i;

    for (i = 0; i < 5; i++) {
        result = result + data[i];
    }

    printf("data 배열의 각 요소의 합은 %d 입니다. ₩n", result);
}
```

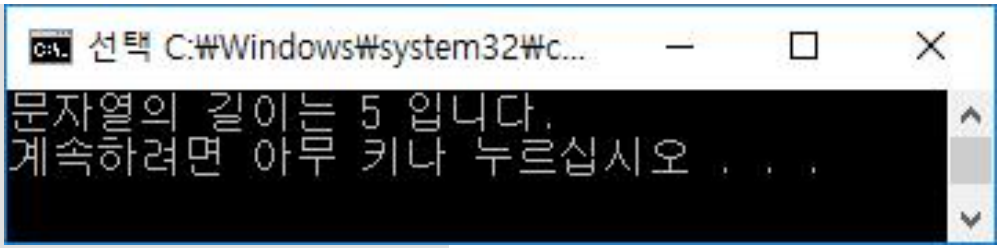


```
char data1=
'H';
char data2= 'e';
char data3= 'l';
char data4= 'l';
char data5= 'o';
char data6= '!';
```

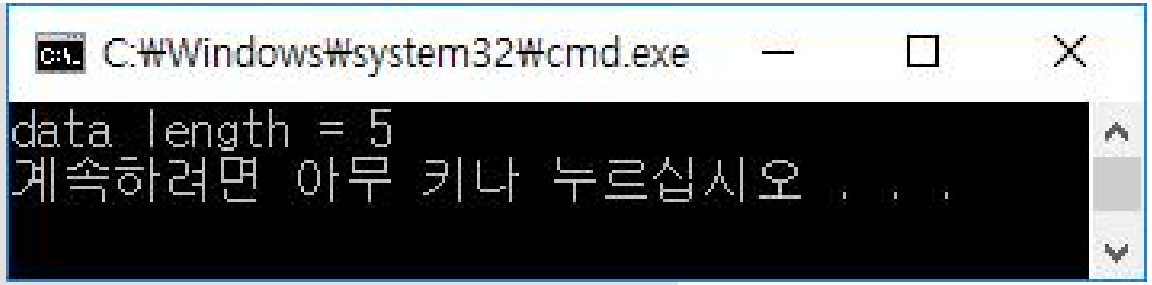
```c
#include <stdio.h>

void main()
{
    char data[6] = { 'h','a','p','p','y',0 };
    char ment[] = { "C programming~" };

    printf("%s₩n",data);
    printf("%s₩n", ment);
}
```



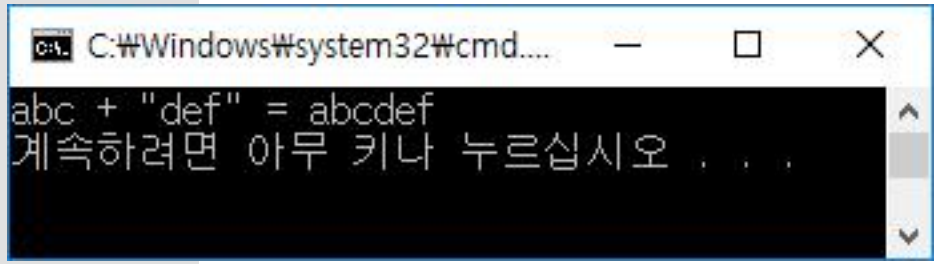
```c
#include <stdio.h>

void main()
{
    char data[6] = "happy";
    int count = 0;
    while (data[count] != 0) {
        count++;
    }
    printf("문자열의 길이는 %d 입니다.₩n",count);

}
```



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

void main()
{
    int data_length;
    char data[10] = { 'h','a','p','p','y',0 };
    data_length = strlen(data);
    printf("data length = %d₩n", data_length);
}
```



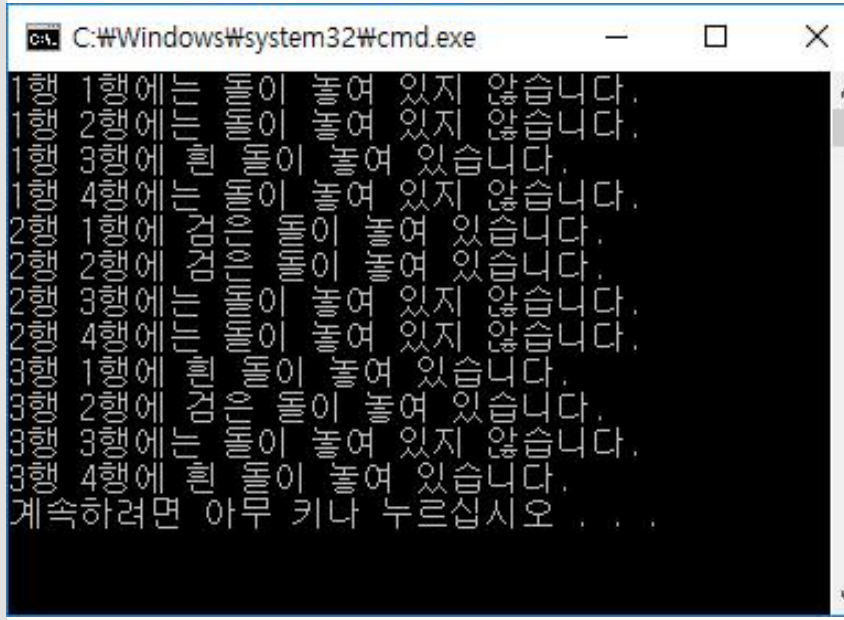
```c
#include <stdio.h>
#include <string.h>

void main()
{
    char data[10] = { 'a','b','c',0 };
    char result[16];

    strcpy(result, data);
    strcat(result, "def");

    printf("%s + ₩"def₩" = %s₩n", data, result);
}
```



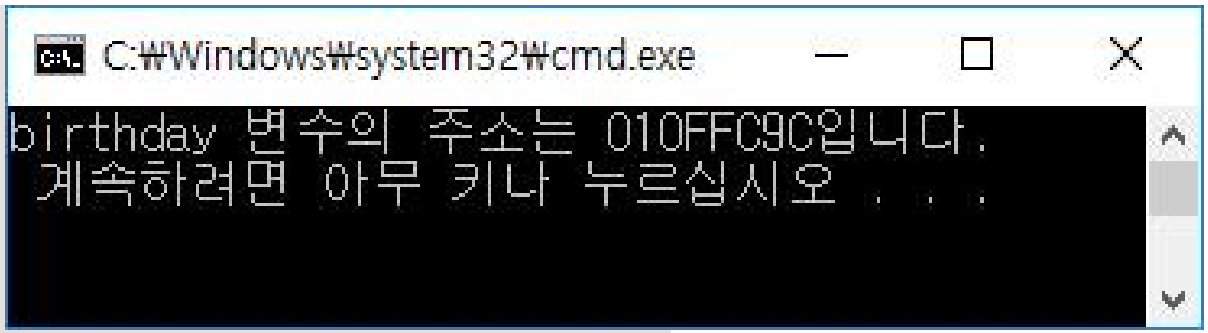
| | | | |
|---|---|---|---|
| data[0][0] | data[0][1] | data[0][2] | data[0][3] |
| data[1][0] | data[1][1] | data[1][2] | data[1][3] |
| data[2][0] | data[2][1] | data[2][2] | data[2][3] |
| data[3][0] | data[3][1] | data[3][2] | data[3][3] |
| data[4][0] | data[4][1] | data[4][2] | data[4][3] |

| | | |
|---|---|---|
| temp[0][0]=1 | temp[0][1]=2 | temp[0][2]=3 |
| temp[1][0]=4 | temp[1][1]=5 | temp[1][2]=6 |

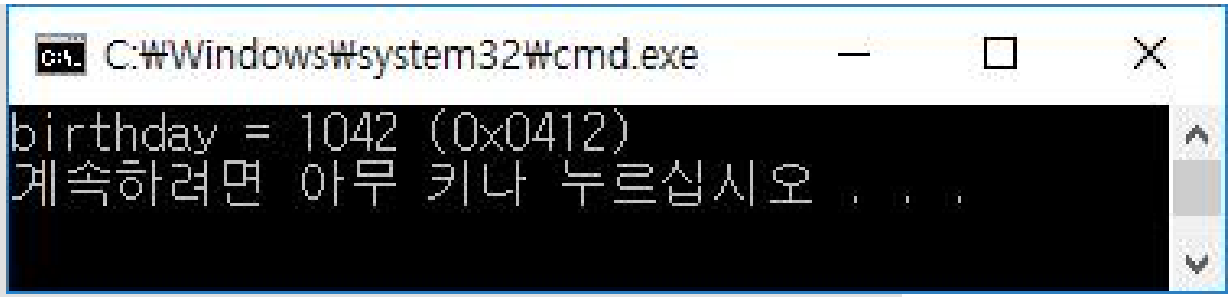
```c
#include <stdio.h>

void main()
{
    char data[3][4] = { {0,0,2,0},{1,1,0,0},{2,1,0,2} };
    int x, y;

    for (y = 0; y < 3; y++) {
        for (x = 0; x < 4; x++) {
            printf("%d행 %d행에", y + 1, x + 1);
            if (data[y][x] == 1) printf(" 검은 돌이 놓여 있습니다.₩n");
            else if (data[y][x] == 2) printf(" 흰 돌이 놓여 있습니다.₩n");
            else printf("는 돌이 놓여 있지 않습니다.₩n");
        }
    }
}
```



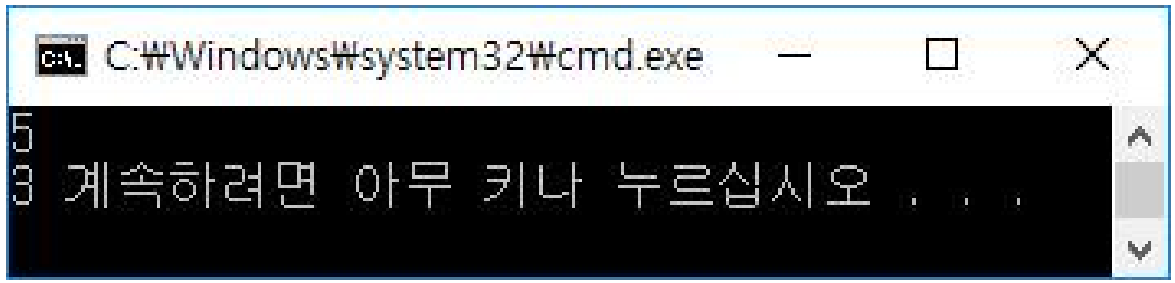
```c
#include <stdio.h>

void main()
{
    short birthday;
    short *ptr;
    ptr = &birthday;

    printf("birthday 변수의 주소는 %p입니다.₩n ",ptr);
}
```



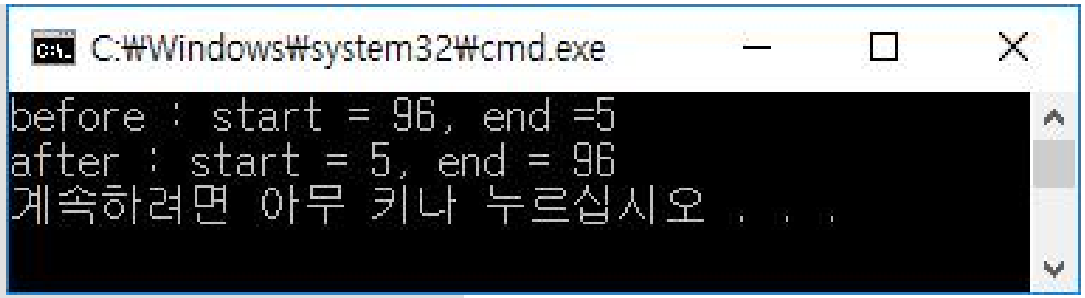
```c
#include <stdio.h>

void main()
{
    short birthday;
    short *ptr;
    ptr = &birthday;
    *ptr = 0x0412;

    printf("birthday = %d (0x%04X)\n", birthday, birthday);
}
```



```c
#include <stdio.h>

void Test(short *ptr)
{
    short soft = 0;
    soft = *ptr;
    *ptr = 3;

    printf("%d ₩n", soft);
}
void main()
{
    short tips = 5;
    Test(&tips);
    printf("%d ", tips);
}
```



```c
#include <stdio.h>

void Swap(int *pa, int *pb)
{
    int temp = *pa;
    *pa = *pb;
    *pb = temp;
}

void main()
{
    int start = 96, end = 5;

    printf("before : start = %d, end =%d₩n", start, end);
    if (start>end) {
        Swap(&start, &end);
    }
    printf("after : start = %d, end = %d₩n", start, end);
}
```



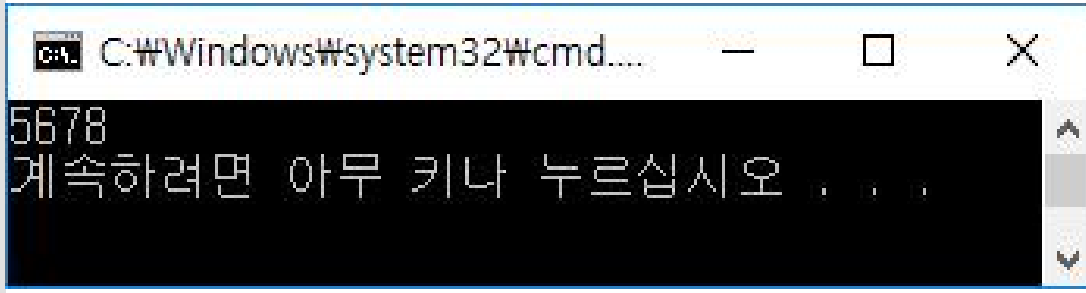
```
int data = 5, temp = 0;
int *const p = &data;
*p = 3;
p = &temp;  오류발생
```

```
int data = 5;
const int *p = &data;
*p = 3;  오류발생
```

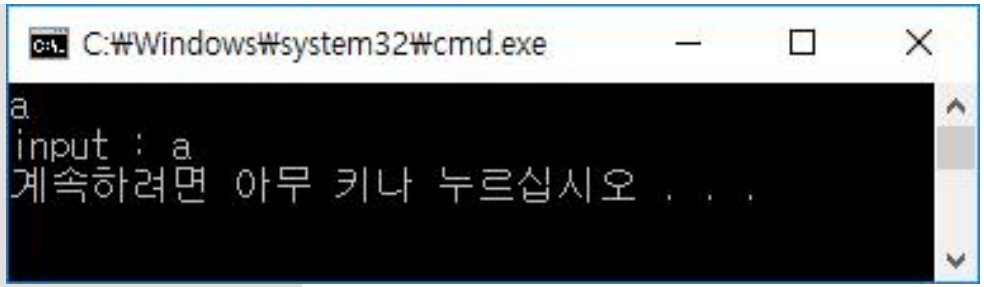
```
short data = 0;
short *p =
&data;
p = p +1;
```

```
char *p1 = (char *)100;
short *p2 = (short *)100;
int *p3 = (int *)100;
double *p4 = (double *)100;
p1++; //101번지
p2++; //102번지
p3++; //104번지
p4++; //108번지
```

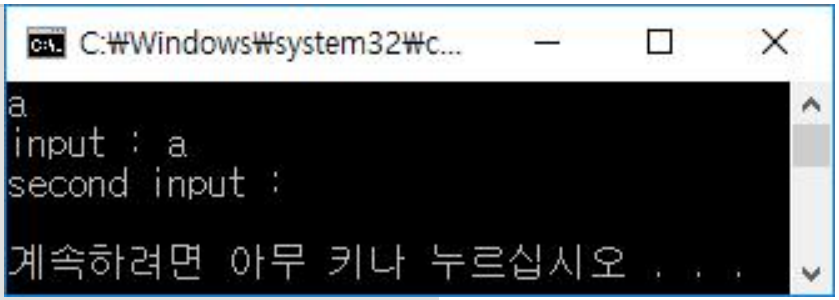
```c
#include <stdio.h>

int GetData(void *p_data, char type)
{
    int result = 0;

    if (type == 1) result = *(char *)p_data;
    else if (type == 2) result = *(short *)p_data;
    else if (type == 4) result = *(int*)p_data;

    return result;
}

void main()
{
    int data = 0x12345678;
    printf("%X\n", GetData(&data, 2));
}
```



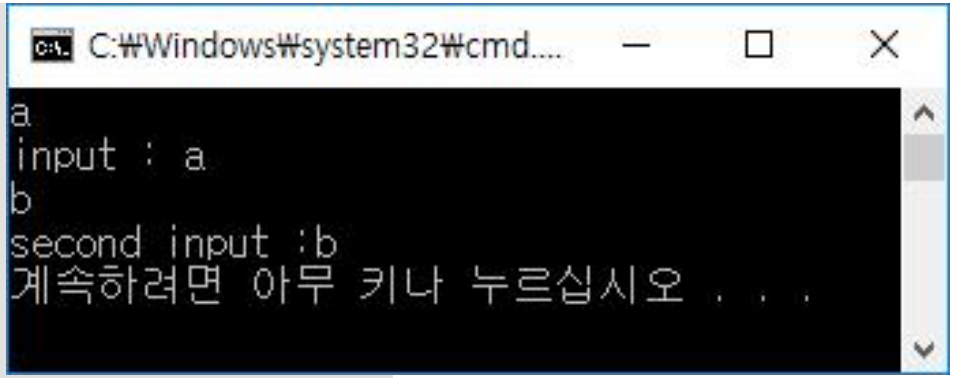
```c
#include <stdio.h>

void main()
{
    int input_data;
    input_data = getchar();

    printf("input : %c\n", input_data);
}
```



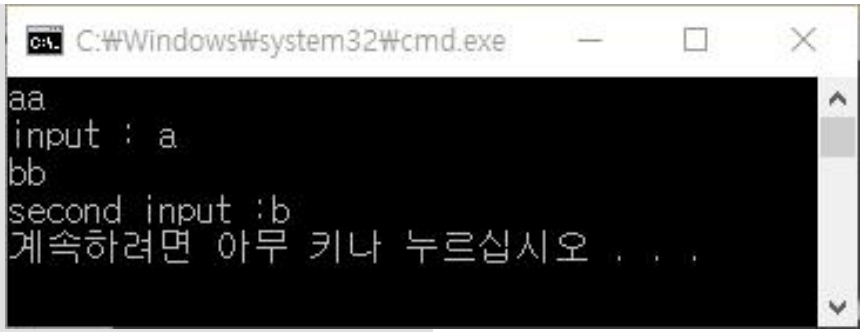
```c
#include <stdio.h>

void main()
{
    int input_data;
    input_data = getchar();
    printf("input : %c\n", input_data);
    input_data = getchar();
    printf("second input :%c\n", input_data);
}
```



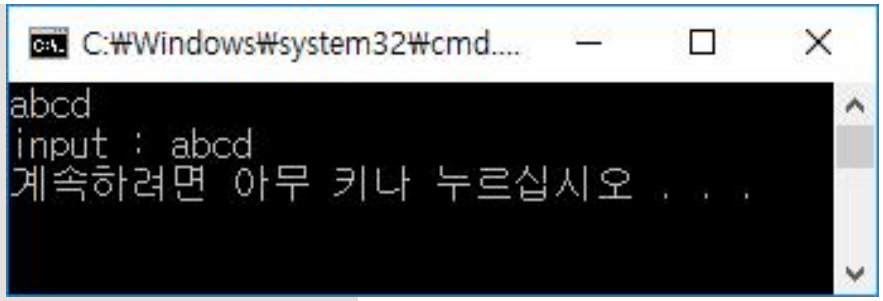
```c
#include <stdio.h>

void main()
{
    int input_data;
    input_data = getchar();
    getchar();
    printf("input : %c\n", input_data);
    input_data = getchar();
    getchar();
    printf("second input :%c\n", input_data);
}
```



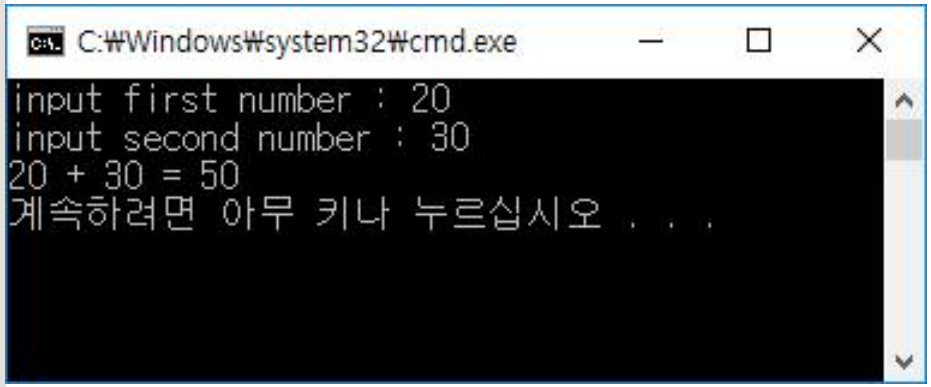
```c
#include <stdio.h>

void main()
{
    int input_data;
    input_data = getchar();
    rewind(stdin);
    printf("input : %c\n", input_data);
    input_data = getchar();
    rewind(stdin);
    printf("second input :%c\n", input_data);
}
```



```c
#include <stdio.h>

void main()
{
    char input_string[10];
    gets(input_string);
    printf("input : %s\n", input_string);
}
```



```c
#include <stdio.h>

int ArrayToInteger(char string[])
{
    int count = 0, num = 0;

    while (string[count] != 0) {
        num = num * 10 + string[count] - '0';
        count++;
    }
    return num;
}

void main()
{
    int first_num, second_num;
    char first_string[16], second_string[16];

    printf("input first number : ");
    gets(first_string);
    printf("input second number : ");
    gets(second_string);

    first_num = ArrayToInteger(first_string);
    second_num = ArrayToInteger(second_string);

    printf("%d + %d = %d\n", first_num, second_num, first_num + second_num);
}
```



```c
#include <stdio.h>

void main()
{
    int num = 0;
    while (1) {
        printf("input age :");
        scanf("%d", &num);

        if (num > 0 && num <= 130) {
            break;
        }
        else {
            printf("잘못된 나이!!₩n");
        }
        printf("당신의 나이 :&d ", num);
    }
}
```