

ex1

```
sumash@localhost:~/test/lab7
1 #include <stdio.h>
2
3 int main()
4 {
5     int a=10;
6     int *pa;
7
8     short int b=20;
9     short int *pb;
10
11     char c='C';
12     char *pc;
13
14     pa = &a;
15     pb = &b;
16     pc = &c;
17
18     printf("%d, %d, %c\n", *pa, *pb, *pc);
19
20     printf("pointer size : %d, %d %d\n", sizeof(pa), sizeof(pb), sizeof(pc));
21
22     return 0;
23 }
24
~
~
~
~
~
"1.c" 24L, 276C 1,1 모두
```

ex2

```
sumash@localhost:~/test/lab7
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     int i;
7     int *a;
8     int *b;
9     int array_a[100];
10
11     a = array_a;
12
13     b = (int *)malloc(sizeof(int) * 4);
14
15     for(i = 0; i < 100; i++) {
16         a[i] = i;
17         b[i] = i;
18     }
19
20     for(i = 0; i < 100; i++) {
21         printf("%d, %d\n", a[i], b[i]);
22     }
23
24     return 0;
25 }
26 █
27
~
~
"2.c" 27L, 290C 26,0-1 모두
```

ex3

```
sumash@localhost:~/test/lab7
1 #include <stdio.h>
2
3 void input1(int a)
4 {
5     a = 30;
6 }
7
8 void input2(int *a)
9 {
10    *a = 30;
11 }
12
13 void swap1(int x, int y)
14 {
15     int temp;
16     temp = x;
17     x = y;
18     y = temp;
19 }
20
21 void swap2(int *x, int *y)
22 {
23     int temp;
24     temp = *x;
25     *x = *y;
26     *y = temp;
27 }
28
29 int main()
30 {
31     int x = 10;
32     int a = 9, b = 4;
33
34     printf("x = %d\n", x);
35     input1(x);
36     printf("x = %d\n", x);
37     input2(&x);
38     printf("x = %d\n", x);
39
40     printf("\n");
41
42     printf("a = %d, b = %d\n", a, b);
43     swap1(a, b);
44     printf("a = %d, b = %d\n", a, b);
45     swap2(&a, &b);
46     printf("a = %d, b = %d\n", a, b);
47
48     return 0;
49 }
50
51
~
~
~
1,1 모두
```

ex4-1

```
sumash@localhost:~/test/lab7
1 void input1(int a)
2 {
3     a = 30;
4 }
5
6 void input2(int *a)
7 {
8     *a = 30;
9 }
10
11 void swap1(int x, int y)
12 {
13     int temp;
14     temp = x;
15     x = y;
16     y = temp;
17 }
18
19 void swap2(int *x, int *y)
20 {
21     int temp;
22     temp = *x;
23     *x = *y;
24     *y = temp;
25 }
26
~
~
~
1,1 모두
```

ex4-2

```
sumash@localhost:~/test/lab7
1 #include <stdio.h>
2
3 int main()
4 {
5     int x = 10;
6     int a = 3, b = 4;
7
8     printf("x = %d\n", x);
9     input1(x);
10    printf("x = %d\n", x);
11    input2(&x);
12    printf("x = %d\n", x);
13
14    printf("\n");
15
16    printf("a = %d, b = %d\n", a, b);
17    swap1(a, b);
18    printf("a = %d, b = %d\n", a, b);
19    swap2(&a, &b);
20    printf("a = %d, b = %d\n", a, b);
21
22    return 0;
23 }
24
25
~
~
~
"4-2.c" 25L, 331C 1,1 모두
```

`gcc -o O2 ex4 4-1.c 4-2.c`

