

Introduction to C Programming Language

Practice 01

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Exercise 01

Try to see the result of the following code:

```
1 printf("hello world\n");  
2 printf("hello\nworld");  
3 printf("\nhello world");
```

What is "\n" used to do?

Output in a new line!

Exercise 02

Try to see the result of the following code:

```
1 int x=6,y=8;
2 printf("x=6,y=8\n");
3 printf("x=%d,y=%d\n",x,y);
4 printf("x=%6d,y=%6d\n",x,y);
5 printf("x=%-6d,y=%-6d\n",x,y);
6
7 short int a=-1;
8 printf("bytes=%lu\n",sizeof(int));
9 printf("a=%u,a=%d\n",a,a);
```

- %d: print an integer
- %u: print an unsigned integer
- %lu: print a long unsigned integer

Exercise 03

Try to see the result of the following code:

```
1 char x='a',y='A';  
2  
3 printf("x=a,y=A\n");  
4 printf("x=%c,y=%c\n",x,y);  
5 printf("x=%d,y=%d\n",x,y);  
6 printf("x=%c,y=%c\n",x+1,y+1);
```

■ %c: print a character

Exercise 04

Try to see the result of the following code:

```
1 float x=5,y=2.5;
2 int i=5,j=2;
3
4 printf("i/j=%d\n",i/j);
5 printf("x/y=%f\n",x/y);
6 printf("1/3=%4.2f\n",1.0/3);
7 printf("1/3=%8.4f\n",1.0/3);
8 ^^I
```

- %f: print a float number
- %m.nf: m the number of total digits, n the number of after the decimal separator.

Try the following statements:

```
1 printf("1/3=%4.2f\n",1/3);
2 printf("1/3=%8.4f\n",1/3);
```

Exercise 05

Try the program in Section 1.2 in your textbook.

$$C = (5/9) * (F - 32)$$

Write a program to print the table:

```
1 0 -17
2 20 -6
3 40 4
4 60 15
5 ...
6 300 148
```