

## Conditional statement:

- ① if condition
- ② if - else condition
- ③ if - else if - else condition
- ④ if ladder / Nested if
- ⑤ if - else ladder

① int a=10, b=20;  
if (a>b) {  
    printf("a is >");  
}

② if (a>b) {  
    printf("a >");  
} else {  
    printf("b >");  
}

③ int a=10, b=20, c=30;

① if (a>b && a>c) {  
    printf("a >");  
}

more condition

② else if (b>a && b>c) {  
    printf("b >");  
}

③ else {  
    printf("c >");  
}

④ if ladder / Nested if

int a=10, b=20, c=30  
{  
    if (a>b) {  
        if (c>b) {  
            printf("c >");  
        }  
    }  
}

⑤ if-else ladder.

if (1) →  
else if (2) →  
else if (3) →  
else if (4) →  
else { }

a=10, b=20, c=30, d=40

① if (a>b) {  
    printf("a >");  
}

② else if (a>c) {  
    printf("a >");  
}

③ else if (a>d) {  
    printf("a >");  
}

④ else {  
    printf("change the value of a");  
}

## Control statement:

- ① looping statement
- ② branching statement
- ③ loop terminating statement

Entry controlled loop (for, while)  
Exit controlled loop (do-while)

jump goto

- ① break
- ② continue

① Entry controlled loop.

① for loop:

Syntax:

for (initialization; condition; increment/decrement) {  
    statement;  
}

n=5  
for (int i=1; i<=n; i++) {  
    printf("i: %d", i);  
}

printf("1");  
printf("2");  
printf("3");  
printf("4");  
printf("5");  
1 2 3 4 5

② while loop:

Syntax:

while (condition) {  
    statement;  
}

int n=5  
while (n>=1) {  
    printf("i: %d", n);  
    n--;  
}

while(1) {  
    printf("Hi");  
}

1 2 3 4 5  
5 4 3 2 1

③ do-while

Syntax:

do {

    printf("Hi");

    while (condition);  
}

② loop terminating statement:

① break

② switch

③ continue

n=5  
for (i=1; i<=n; i++) {  
    if (i==3) {  
        break;  
    }  
    printf("i: %d", i);  
}

Continue →

1 2 4 5

1 2

Switch

Syntax:

switch (condition) {

    case 1:

    case 2:

    case 3:  
}

int choice=2;

switch (choice) {

    case 1: printf("Hi");

    break;

    case 2: printf("Bye");

    break;

    case 3: printf("Continue");

    break;