

Control statements in C

1. Selection (Decision making)

if
if else
nested if
if else if else

2. Iteration (looping)

for
while
do-while

3. Jump statement

break
continue
goto
return

if statement

Syntax:-

```
if (condition) True/1
{
}
≡
{
}
```

Examp1:-

```
int a=10;
if (a==10) 10==10 → True/1
{
    printf("a is 10"); → a is 10
}
```

Examp2:-

```
int a=10;
→ if (a==5) 10==5 No false 0
✗ {
    printf("a is 5");
}
≡
```

Day #7.3

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Syntax -

```
if (condition)
{
}
else
{
}
```

Example:-

```
int a = 10;
→ if (a == 5) 10 == 5 False / 0
{
}
else
{
}
→ else
{
}
→ printf("In a is not 5"); ⇒ a is not 5
```

if else statement in C

Example:-

```
int a = 10;
→ if (a == 10) 10 == 10 True / 1
{
}
else
{
}
X {
}
printf("In a is not 10");
```

Syntax:-

```

✓ if (condition)      ✓      ✓
{
  //
}
✓ else if (condition) ✓      ✓
{
  //
}
✓ else                ✓      ✓
{
  //
}

```

Only one condition block is executed

if else if else statement in C

Example:-

```

int a = 10;      -ve, +ve
→ if (a == 5)    10 == 5 ×      -1 == 5 × false
{
  printf("a is 5");
}
→ else if (a == 10) 10 == 10 ✓ True/1      -1 == 10 × false
{
  printf("a is 10"); → a is 10
}
× else
{
  printf("a is neither 5 nor 10");
}

```

→

a = 100 → a is neither 5 nor 10

a = 0 → "

a = -1 → "

Day #17. 5

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In if-elseif-else we can have n no of else-if

Example- int a = 10;

```
if (a == 5)
{
    printf("a is 5");
}
```

```
else if (a == 6)
{
    printf("a is 6");
}
```

```
else if (a == 8)
{
    printf("a is 8");
}
```

```
else if (a == 10)
{
    printf("a is 10");
}
```

```
else
{
    printf("a is not in {5, 6, 8, 10}");
}
```

```
if (condition)
{
    //
}
```

```
else if (condition)
{
    //
}
```

```
else if (condition)
{
    //
}
```

===== n no. of else if

```
else
{
    //
}
```

Syntax -

```

1 {
  if (condition)
  {
    // ...
  }
}

```

Nested if Statement.

Example -

```

int age = 20;
int citizen = 1;
int voter-id = 1;

```

```

→ if (age >= 18)
{
  printf("In You are 18+");
  if (citizen == 1) ✓
  {
    printf("In You are citizen"); ✓
    if (voter-id == 1) ✓
    {
      printf("In You have voter id also");
      printf("In You can vote");
    }
  }
}

```

Output → You are 18+
You are citizen
You have voter id
You can vote

```

int age = 20;
int citizen = 0;
int voter-id = 1;

```

Output →
You are 18+

— x —
int age = 15

Output → No output

— x —
int age = 18;
int citizen = 1;
int voter-id = 0;

Output →
You are 18+
You are citizen