

Conditional Statement

A **conditional statement** is used to make decisions in a program. It checks whether a condition (expression) is True or False, and then executes a block of code accordingly.

Types of Conditional Statements in Python

1. if statement

The if statement runs a block of code **only when the condition is true**.

Example:

```
age = 20
```

```
if age >= 18:  
    print("You are eligible to vote.")
```

2. if-else statement

Here, if the condition is **true**, one block runs, otherwise the **else block** runs.

Example:

```
marks = 35
```

```
if marks >= 40:  
    print("You passed the exam.")  
else:  
    print("You failed the exam.")
```

3. if-elif-else statement

When there are **multiple conditions**, we use elif (else if).

Example:

```
number = 0
```

```
if number > 0:
    print("Positive number")
elif number < 0:
    print("Negative number")
else:
    print("Zero")
```

4 Nested if

When we put an if statement **inside another if**, it's called a **nested if**. It is useful when one condition depends on another.

Example:

```
num = 15
```

```
if num > 0:
    print("Number is positive")
    if num % 2 == 0:
        print("It is even")
    else:
        print("It is odd")
```

In short:

- if → single condition
 - if-else → two-way decision
 - if-elif-else → multiple choices
 - nested if → decision inside another decision
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