

Python If, Else, Elif Statements: Multiple Conditions: Takeaways



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Syntax

- Combining multiple conditions:

```
if 3 > 1 and 'data' == 'data':  
    print('Both conditions are true!')  
if 10 < 20 or 4 <= 5:  
    print('At least one condition is true.')
```

- Building more complex if statements:

```
if (20 > 3 and 2 != 1) or 'Games' == 'Games':  
    print('At least one condition is true.')
```

- Using the else clause:

```
if False:  
    print(1)  
else:  
    print('The condition above was false.')
```

- Using the elif clause:

```
if False:  
    print(1)  
elif 30 > 5:  
    print('The condition above was false.')
```

Concepts

- We can use an **if statement** to implement a condition in our code.
- An **elif** clause executes if the preceding **if** statement (or the other preceding **elif** clauses) resolves to **False** and the condition specified after the **elif** keyword evaluates to **True**.
- True** and **False** are **Boolean values**.
- Python evaluates any combination of Booleans to a single Boolean value.
- and** and **or** are **logical operators**. They unite two or more Booleans.
- As a general rule, when we combine Booleans using **and**, the resulting Boolean is **True** only if all the Booleans are **True**. If any of the Booleans are **False**, then the resulting Boolean will be **False**.
- We can compare a value **A** to value **B** to determine the following:
 - A** is **equal** to **B** and vice versa (**B** is equal to **A**) — **==**
 - A** is **not equal** to **B** and vice versa — **!=**
 - A** is **greater** than **B** or vice versa — **>**

- `A` is **greater than or equal to** `B` or vice versa — `>=`
- `A` is **less** than `B` or vice versa — `<`
- `A` is **less than or equal to** `B` or vice versa — `<=`

Resources

- [If and elif Statements in Python](#)