RELATIONAL OPERATORS

PYTHON BASICS

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TOPIC OUTLINE

Equal to Operator

Not Equal to Operator

Greater than Operator

Less than Operator

Greater than or Equal to Operator

Less than or Equal to Operator

RELATIONAL OPERATORS

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Relational operators are used to **compare** two values or expressions. They evaluate the relationship between the operands and return a Boolean value **(True or False)**. These operators are commonly used in decision-making statements like **if-else** and **for** loops.

EQUAL TO OPERATOR

Equal to **(==)** operator evaluates if two operands are equal. It returns **True** if the values are **equal**, and **False** otherwise.

Example

```
a = 5

b = 5

a == b # evaluates to True
```

```
a = 0

b = 5

a == b # evaluates to False
```

NOT EQUAL TO OPERATOR

Not equal to **(!=)** operator evaluates if two operands are not equal. It returns **True** if the values are **not equal**, and **False** otherwise.

Example

```
a = 5

b = 5

a != b # evaluates to False
```

```
a = 0

b = 5

a != b # evaluates to True
```

GREATER THAN OPERATOR

Greater than **(>)** operator returns **True** if the left operand is **greater** than the right operand, and **False** otherwise.

Example

```
a = 5

b = 0

a > b # evaluates to True


a = 0

b = 5

a > b # evaluates to False
```

LESS THAN OPERATOR

Greater than **(<)** operator returns **True** if the left operand is **less** than the right operand, and **False** otherwise.

Example

```
a = 5

b = 0

a < b # evaluates to False


a = 0

b = 5

a < b # evaluates to True
```

GREATER THAN OR EQUAL OPERATOR

Greater than or equal **(>=)** returns **True** if the left operand is **greater than or equal** to the right operand, and **False** otherwise.

Example

```
a = 3

b = 3

a >= b # evaluates to True


a = 5

b = 3

a >= b # evaluates to True
```

LESS THAN OR EQUAL OPERATOR

Less than or equal **(<=)** returns **True** if the left operand is **less than or equal** to the right operand, and **False** otherwise.

Example

```
a = 3

b = 3

a <= b # evaluates to True
```

```
a = 5

b = 3

a <= b # evaluates to False
```

LABORATORY