Python Operators

[Class-3]

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Class Topics

- Python Operators
- Problem Solving [BeeCrowed]

Python Operators : Introduction

- The operator can be defined as a symbol which is responsible for a particular operation between operands.
- Python provides a variety of operators, which are described as follows:
  - Arithmetic operators
  - Comparison operators
  - Assignment Operators
  - Logical Operators [Discuss it later]
  - Bitwise Operators
  - Membership Operators
  - Identity Operators

<Operator> : Arithmetic Operators

- Arithmetic operators are used to perform arithmetic operations between two operands.

Addition (+)	It is used to add operands.
Subtraction (-)	It is used to subtract the second operand from the first operand.
Divide (/)	It returns the quotient after dividing the first operand by the second operand.
Multiplication (*)	It is used to multiply one operand with the other.
Reminder (%)	It returns the reminder after dividing the first operand by the second operand.
Exponent (**)	It is an exponent operator represented as it calculates the first operand power to the second operand.
Floor division (//)	It gives the floor value of the quotient produced by dividing the two operands.

<Operator> : Comparison operator

- Comparison operators are used to comparing the value of the two operands and returns Boolean true or false accordingly.

==	If the value of two operands is equal, then the condition becomes true.
!=	If the value of two operands is not equal, then the condition becomes true.
<=	If the first operand is less than or equal to the second operand, then the condition becomes true.
>=	If the first operand is greater than or equal to the second operand, then the condition becomes true.
>	If the first operand is greater than the second operand, then the condition becomes true.
<	If the first operand is less than the second operand, then the condition becomes true.

<Operator> : Assignment Operators

- The assignment operators are used to assign the value of the right expression to the left operand.

+=	=
-=	*=
%=	**=
//=	

<Operator> : Logical Operators

- The logical operators are used primarily in the expression evaluation to make a decision.

and	or
not	

<Operator> : Membership Operators

- Python membership operators are used to check the membership of value inside a Python data structure. If the value is present in the data structure, then the resulting value is true otherwise it returns false.

in	It is evaluated to be true if the first operand is found in the second operand
not in	It is evaluated to be true if the first operand is not found in the second operand

<Operator> : Identity Operators

- The identity operators are used to decide whether an element certain class or type.

is	It is evaluated to be true if the reference present at both sides point to the same object.
is not	It is evaluated to be true if the reference present at both sides do not point to the same object.

Operator Precedence

- Operator precedence in Python simply refers to the order of operations.
- Order of operations
  - BEDMAS
    1) B= Bracket
    2) E = Exponentiation
    3) D = Division
    4) M = Multiplication
    5) A = Addition
    6) S = Subtraction

```
X = (5 + 3) * 2 ** 2
print(X) # 32
```

Problem Solving :

- [01] https://www.beecrowd.com.br/judge/en/problems/view/1000
- [02 - Assignment] https://www.beecrowd.com.br/judge/en/problems/view/1001
- [03 - Assignment] https://www.beecrowd.com.br/judge/en/problems/view/1002
- [04 - Assignment] https://www.beecrowd.com.br/judge/en/problems/view/1003
- [05] https://www.beecrowd.com.br/judge/en/problems/view/1004
- [06] https://www.beecrowd.com.br/judge/en/problems/view/1005
- [07 - Assignment] https://www.beecrowd.com.br/judge/en/problems/view/1006
- [08 – Assignment] https://www.beecrowd.com.br/judge/en/problems/view/1007


THANKS FOR LISTENING
ANY QUESTIONS?
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