

## Day 3:

$a = 10$ ,  $b = 3$

### 1. operators:

- (+) - Addition      Print ("Addition: {a+b}")
- (-) - Subtraction
- \* - multiplication
- / - division (float)
- // - floor division
- % - Modulus (remainder)
- \*\* - Exponential.

### 2. Comparison operators:      return True (or) False

- == - Equal to
- != - Not equal to
- > - Greater than
- < - lesser than
- >= - Greater than or equal to
- <= - less than or equal to

### 3. Logical operators:

- and - True, if both conditions true
- or - True, if atleast one condition is
- not - reserves the result.



## A. Assignment operators:

$=$   $x = 10$   
 $+=$   $x = x + 3$   
 $- =$   $x = x - 3$   
 $* =$   $x = x * 3$   
 $/ =$   $x = x / 3$   
 $// =$   $x = x // 3$   
 $\% =$   $x = x \% 3$   
 $** =$   $x = x ** 3$

5. Identity operators:  
 is - Returns True, if both are same object  
 is not - Returns True, if both variables do not refer to the same object

6. membership operators:  
 in : Returns True, if a value exists in the sequence  
 not in : Returns True if a value does not exist in the sequence.

## 7. Bitwise operators:

$&$  - AND  
 $|$  - OR  
 $\wedge$  - XOR  
 $\sim$  - NOT  
 $<<$  - left shift  
 $>>$  - right shift

False

true  
 condition is true

## Conditional Statements

- allows a program to make decision
- Execute specific code based on conditions.
- They help to control the flow of a program.

### Types:

1. if Statement  
Code to execute if condition is True.

age = 18 if

age >= 18

print ("Eligible to vote")

2. if else:

if condition is True, else:

else, if condition is False.

3. if - elif - else:

if condition 1:

code if condition 1 is true,

elif condition 2:

code if condition 2 is true, else:

else, code if condition is false.

A. Nested if:

An if statement

is called nested if.



Syntax:

if condition 1:

if condition 2:

the code if both conditions are True.

What are the rules to declare a variable in python?

1. Start with letter (or) underscore
2. no spaces
3. can contain letters, numbers, underscores
4. case sensitive
5. cannot be a python keyword.

Keyword in python:

- Reserved word that has a special meaning - and

cannot be used as an identifier.

To find keyword in python:

```
import keyword
```

```
print(keyword.kwlist)
```

```
print(len(keyword.kwlist))
```