



## Keywords :

Keywords are predefined, reserved words used in python programming

We cannot use a keyword as a variable name, function name, or identifier.

→ In python there 35 keywords like none, break, except, raise, take - -

## Identifiers

It are the name given to variables, classes, methods etc.

## Method/Function identifiers

ex: def calculate\_area(length, width):

return length \* width

## Identifiers

### Class identifiers

class students:

Some Rules

Start with letter (a-z) <sup>under score</sup>  
Don't start with number  
Don't use keywords

## • Variable:

It is a container (or) storage area.

## • Variables vs identifiers

identifiers are names given to entities like variables, functions, class, etc.

Variable are specific type of identifier used to store and manipulate data.

## • Constants:

A constant is a variable value doesn't change.  
import constant

EX: print (constant.PI)  
Print (constant.gravity)

## • Literals

It are representations of fixed values in a program.  
They can be numbers, characters, strings, etc.

a = 100  
↓  
variable      → literal

## Types of literal

1. numeric literal

2. string

3. Boolean 4. None 5. Bytes and byte





## • Data types:

- ① String ② int ③ complex ④ float  
 ⑤ list ⑥ tuple ⑦ dictionary ⑧ set ⑨ boolean  
 ⑩ None

tuple - immutable - cannot change ( , , ) <sup>False</sup>

list - mutable - can change [ , , ]

dict = {name: 'mahith', 'age': 21}

Set = list of element cannot repeat

None: a = None

## • Type conversions:

It is process of converting data of one data type to another data type.

## Introduction to ASCII values

The ASCII value of a character is a number.

Ex:  $A = 65$   $B = 66$   $C = 67$   
 $a = 97$   $b = 98$   $c = 99$

- ①  $\text{ord}()$   $\rightarrow$  It is used find value of letter.  
②  $\text{chr}()$   $\rightarrow$  It " " " letter of value  
 $A = 65$

## Operators

- ① Arithmetic operators  $+$ ,  $-$ ,  $*$ ,  $/$
  - ② Assignment operators  $=$ ,  $+=$ ,  $-=$ ,  $*=$ ,  $/=$ ,  $\% =$
  - ③ Comparison operators  $==$ ,  $!=$ ,  $>$ ,  $<$ ,  $>=$ ,  $<=$
  - ④ Logical operators  $\&$ ,  $\&\&$ ,  $\&\&\&$
  - ⑤ Bitwise operators  $\&$ ,  $\&\&$ ,  $\&\&\&$
  - ⑥ Special operators  $\&\&\&$ ,  $\&\&\&$
- Example:  $a = 1$ ,  $b = 2$ ,  $c = a + b$ ,  $\text{print}(c)$   
 $3/2 = 1.5$  (float)  
 $3//2 = 1$  (integer)  
Cord of memory

### Assignment operators

$=$ ,  $+=$ ,  $-=$ ,  $*=$ ,  $/=$ ,  $\% =$ ,  $\&\&\&$ ,  $\&\&\&$ ,  $\&\&\&$

### Comparison operators

$==$ ,  $!=$ ,  $>$ ,  $<$ ,  $>=$ ,  $<=$

$a = a + b$   
 $a + b$  same