

Class XII

Python

- 1) Python is an object oriented programming language
- 2) Python was developed by 'Guido van Rossum' & launched in 1991
- 3) Python has been developed using 'C' programming lang.
- 4) Python is an interpreted language. But compiled & then interpreted.

TOKEN: Tokens are smallest individual elements of a programming language. Token has been broadly categorised into 5 parts. Tokens are:

K → Keyword

I → Identifier

L → Literal

P/S → Punctuation / Separator

O → Operator.

"like an atom which is a fundamental & smallest unit"

- 1) Keywords: Keywords are reserved words by a programmer in a language that has a specific meaning.

There are total 35 keywords

Ex → if, while, for, else, elif, break, continue, True, False, Not, nonlocal, void, int

- 2) Identifier: Identifier are the names given to a variable, function, class, etc.

a) variable: variable is one that stores values

↓
variable are named storage location

like: a = 5 5
b = 'Python' a → variable b → variable

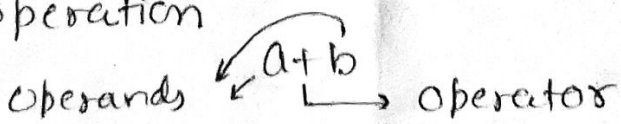
Rules for identifier

- 1) A keyword can't be an identifier
 $if = 10$ X $IF = 10$ ✓
- 2) It can't contain special characters (symbol) except underscore
 $rupees ₹$ X $_Nam$ ✓ RAM X
- 3) Space is not allowed
- 4) The 1st character must be an alphabet or an underscore
 $10A = 20$ X $A10 = 10$ ✓
- 5) Identifiers are case sensitive.

Board Exam: -

valid / Invalid identifiers

Practise some Questions

- c) Literals: Literals or constants are fixed values that never changes
for example $\pi = 3.14$
- d) Punctuator / Separator: Punctuator / Separator are used to separate one token with another
E.g. , ; ' " { } [] ()
- e) Operator: Operator are those that perform some operation

- i) Arithmetic operator - +, -, *, /, %
// → floor division
** → Exponentiation
- ii) Relational Operator: Used for comparison
>, <, >=, <=, ==, !=
- iii) Logical operator: Used to combine two or more conditions together
