Basics

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Python was developed by Guido van Rossum in the early 1990s and its latest version is 3.7.1, we can simply call it as Python3. Python 3.0 was released in 2008. and is interpreted language i.e it's not compiled and the interpreter will check the code line by line. This article can used to learn very basics of Python programming language.

So before moving on further.. let's do the most

popular ‘HelloWorld’ tradition 😀 and hence compare Python’s Syntax with C, C++, Java (I have taken these 3 because they are most famous and mostly used languages).

code:

```
# Python code for "Hello World"
# nothing else to type...see how simple is the syntax.

print("Hello World")
```

Python is a high-level, general-purpose and a very popular programming language. Python programming language (latest Python 3) is being used in web development, Machine Learning applications, along with all cutting

edge technology in Software Industry. Python Programming Language is very well suited for Beginners, also for experienced programmers with other programming languages like C++ and Java.

***there are two types of python version:-**

1)python 2

2)python 3

There are lots of code editors

to use python, but i recommend you

only one that is visual studio code

***Reasons for increase popularity:-**

1)Emphasis on code readability shorter

codes,ease of writing.

2)Proframmers can express logical concepts in fewerlines of codes.

***Language features:-**

1)there are no separate compiler.

2)directly programm can be run.

3)large libraries.

***Platform**

-multiple os support

SET 1

1. True : This keyword is used to represent a boolean true. If a statement is true, “True” is printed.

2. False : This keyword is used to represent a boolean false. If a statement is false, “False” is printed.

True and False in python are same as 1 and 0.
Example:

3. None : This is a special constant used to denote a null value or a void. Its important to remember, 0, any empty container(e.g empty list) do not compute to None

4. and : This a logical operator in python. “and” Return the first false value .if not found return last.

5. or : This a logical operator in python. “or” Return the first True value.if not found return last.

6. not : This logical operator inverts the truth value. The truth table for “not” .

7. assert : This function is used for debugging purposes. Usually used to check the correctness of code. If a statement evaluated to true, nothing happens, but when it is false, “AssertionError” is raised . One can also print a message with the error, separated by a

comma.

8. break : “break” is used to control the flow of the loop. The statement is used to break out of the loop and passes the control to the statement following immediately after loop.

9. continue : “continue” is also used to control the flow of code. The keyword skips the current iteration of the loop, but does not end the loop.

Loops and Control Statements (continue, break and pass) in Python

10. class : This keyword is used to declare user defined classes. For more info. click here.

11. def : This keyword is used to declare user

defined functions. For more info. click here.

12. if : It is a control statement for decision making. Truth expression forces control to go in “if” statement block.

13. else : It is a control statement for decision making. False expression forces control to go in “else” statement block.

14. elif : It is a control statement for decision making. It is short for “else if”

if, else and elif conditional statements are explained in detail here article.

15. del : del is used to delete a reference to an object. Any variable or list value can be deleted using del.

16. try : This keyword is used for exception handling, used to catch the errors in the code using the keyword except. Code in “try” block is checked, if there is any type of error, except block is executed.

17. except : As explained above, this works together with “try” to catch exceptions.

18. raise : Also used for exception handling to explicitly raise exceptions.

19. finally : No matter what is result of the “try” block, block termed “finally” is always

executed. Detailed article –Exception Handling in Python.

20. for : This keyword is used to control flow and for looping.

21. while : Has a similar working like “for” , used to control flow and for looping.

22. pass : It is the null statement in python. Nothing happens when this is encountered. This is used to prevent indentation errors and used as a placeholder

Detailed Article – for, while, pass

23. import : This statement is used to include a particular module into current program.

24. from : Generally used with import, from is used to import particular functionality from the module imported.

25. as : This keyword is used to create the alias for the module imported. i.e giving a new name to the imported module. E.g import math as mymath.

Detailed Article – import, from and as

26. lambda : This keyword is used to make inline returning functions with no statements allowed internally. Detailed Article – map, filter, lambda

27. return : This keyword is used to return from the function. Detailed article – Return

values in Python.

28. yield : This keyword is used like return statement but is used to return a generator. Detailed Article – yield keyword

29. with : This keyword is used to wrap the execution of block of code within methods defined by context manager.This keyword is not used much in day to day programming.

30. in : This keyword is used to check if a container contains a value. This keyword is also used to loop through the container.

31. is : This keyword is used to test object identity, i.e to check if both the objects take same memory location or not.

32. global : This keyword is used to define a variable inside the function to be of a global scope.

33. non-local : This keyword works similar to the global, but rather than global, this keyword declares a variable to point to variable of outside enclosing function, in case of nested functions.