

IT TOOLS and Practices

PEP In Python.

1. What is PEP?

- ✓ The PEP is an abbreviation form of Python Enterprise proposal writing proper logic is a key factor of programming many other but important factors can affect" the code quality. The developer's coding style makes the code much reliable, every developer should keep in mind that python Strictly follows the way of order and format of the string. Adaptive a nice coding style makes the code code becomes easy more readable. The for end-user.

PEP 8 is a document that provides various guidelines to write the readable in Python PEP 8 describes how the developer written in 2001 by Guido Van Rossum Barry Warsaw, and Nick Coghlan. The main aim of PEP is to enhance the readability and consistency of code.

2. Why PEP 8 is important?

- ✓ PEP 8 enhance the readability of the python code, but why is readability Creator Python, of So important ? Guiele van Rossum said, " code is much more often than it is written" The code can be written in a few minute, a few hours, or a whole day but once we have written the code, we will never rewrite it again. But sometimes, we need to reuse cade again and again.
- ✓ At this point, we must have an idea of why we wrote the particular line in the coole The code should reflect the meaning of each line. That's why readability is so much important.
- ✓ Noming Convention: When we write the code we need to assign name my things such a variables, to many functions classes, packages, and a lot more things selecting a proper name will save time and energy. When we look back to the life after some time, we can easily recall what a certain variable, function or class represents Developers should avoid choosing inappropriate names. The naming convention in Python is slightly messy, but there are certains convention that we can follow easily.

Example : Single Lowercase letter /a=10

Single uppercase A = 10¹ letter

Lowercase Var = 10

Lower case with underscores number of apple=5₁

UPPERCASE VAR = 6

UPPER CASE WITH- UNDERSCORES NUM OF CARS = 20

Capitalizedwards (or camelcase). Number of Books = 100

❖ Name Style :

Type	Noming Convention	Examples
Function	We should use the lowercase words. or seperates words by the underscore.	My function , my function
Variable	We should use a lowercase de letter words, or seperate words. to enhance the readability.	a, var variable_name
Class	The first letter of class name should be capitalized: use camel case. Do not seperate with the underscore words.	My class, form, Model.
Method	We should use a lowercase letter words, or seperate words to enhance, readability Method.	Class_method, method.
Constant	We should use a short, uppercase letters, words or seperate words to enhance the readability.	MyConstant, Constant, My_Constant.
Module	We should use a lowercase letter, words or seperate words to enhance the readability	Moelule_name py, modulepy.
Package	We should use a lowercase letter, or seperate words to enhance the redability . Do not separate words with underscore.	Package, mypackage.

- ❖ **Code Layout:** The code layout defines how much the code is readable. In this section, I we will learn how to use whitespace code red readability to impress code readability.
- ❖ **Indentation:** Unlike other programming define the code indentation is languages, des, the block in Python. The indentations are the important part of the python programming language and it determines the level of Times. of code Generally, we use the 4space for indentation .

Example : x=5

If x== 5:

print ('x is larger than 5)

In above example, the indented print statement will get executed if the so condition of if statement is true. This indentation defines. the code block and tells.. us what statements. execute when a function is called or condition tigger.

- ❖ **Tabs vs space.**

We can also use the tabs, to provide the consecutive space to indicate the indentation. but whitespaces are the most preferable python 2 allows the mixing spaces but we will get of table tabs and Van error in python.

- ❖ **Indentation following Line Break.**

It is essential to use indentation when using continuations to keep the lines to fewer than 79 characters. It provides the flexibility to determining between two lines of I code and a single line of code that extends two lines.

Examples : 1. # Correct way :

Aligned with opening delimiter.

obj func_name (argument -one, argument two, argument_three, argument_four)

2. #first line doesn't has any argument. # We add 4 spaces from the second line to descriminate arguments from the rest. det function name (argument -one, argument two, argument_three, argument_four)

Print(argument_two)

#4 space indentation to add a level foo = long__function name1

Var_one, var _two, var_three, var_ four)

- ❖ Use docstring Python provides the two types of document strings or docstring - single line and multiple lines. We use the triple quotes to define a single line or multiline quotes. So, these are used to describe the function or particular program.

Eg : def, add (0,6):

```
"""This is simple method. """
```

```
"""This is a
```

```
Simple add program to add the two numbers"""
```

- ❖ Should a Line Break Before Binary Operator? The lines break or after a or after a binary operation is a traditional approach. But it affects the readability extensively because the operators are scattered across the different screens, and each operator is kept away from its operand and onto from its the previous line.

- ❖ The import statement should be written at the top of the File or just after any module comment. Absolute imports are the recommender because they are more readable and tend to be better behaved.

```
import nypkg. sibling from mypkg import sibling from mypkg  
sibling import example.
```

However, we can use the explicit relative imports instead of absolute imports, especially dealing with complex packages.

- ❖ Blank Lines.

Blank Lines can be improved the readability of python code. If many lines of code branched together the code will become harder to read. We can remove this by using the many blank vertical lines, and the reader will need to scroll more than necessary. Follow the below instructions to add vertical whitespace.