

Practical no:-7
Implementing coding practices in Python using PEP8.

1. PEP stands for Python Enhancement Proposal. A PEP is a design document providing information to the Python community, or describing a new feature for Python or its processes or environment. The PEP should provide a concise technical specification of the feature and a rationale for the feature.
2. PEP 8 is a document that provide guidelines and best practices on how to Write Python code. It was written in 2001 by Guido van Rossum, Barry Warsaw, and Nick Coghlan. The primary focus of PEP8 is to improve the Readability and consistency of Python code.
3. We intend PEPs to be the primary mechanisms for proposing major new features, for collecting community input on an issue, and for documenting the design decisions that have gone into Python. The PEP author is responsible for building consensus within the community and documenting dissenting opinions.

Code:-

```
import string
SHIFT = 3
CHOICE = input("would you like to encode or decode?")
WORD = input("Please enter text")
LETTERS = string.ascii_letters + string.punctuation + string.digits
ENCODED = ' '
if CHOICE == "encode":
    for letter in WORD:
        if letter == ' ':
            ENCODED = ENCODED + ' '
        else:
            x = (LETTERS.index(letter) +
                SHIFT)
            ENCODED = ENCODED + LETTERS[x]
if CHOICE == "decode":
    for letter in WORD:
        if letter == ' ':
            ENCODED = ENCODED + ' '
        else:
            x = LETTERS.index(letter) - SHIFT
            ENCODED = ENCODED + LETTERS[x]

print(ENCODED)
```

Output:-

```
==== RESTART: C:\Users\santo\OneDrive\Documents\SEM 2\IT TOOLS\PEP8 Codes.py ===  
would you like to encode or decode?encode  
Please enter textShantanu Vishwakarma  
Vkdqwdqx Ylvkzdndupd  
>>>  
==== RESTART: C:\Users\santo\OneDrive\Documents\SEM 2\IT TOOLS\PEP8 Codes.py ===  
would you like to encode or decode?decode  
Please enter textVkdqwdqx Ylvkzdndupd  
Shantanu Vishwakarma  
>>> |
```