1. **Exploring Linters to Support Testing in Python: Question 1**

"""

This is a Docstring

"""

def factorial(n):

  """ Return factorial of n """

  if n == 0:

    return 1

  return n\*factorial(n-1)

* **What happens when the code is run?**

When the code is run, the program’s output is empty.

* **Can you modify this code for a more favourable outcome? What amendments have you made to the code?**

To display an output of the program, we just have to call the function with its parameter and print the result.

# **Exploring Linters to Support Testing in Python: Question 2**

*# SOURCE OF CODE: https://docs.pylint.org/en/1.6.0/tutorial.html*

import string

shift = 3

choice = raw\_input("would you like to encode or decode?")

word = (raw\_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

print(encoded)

* **Review each of the code errors returned. Can you correct each of the errors identified by *pylint*? Before correcting the code errors, save the pylintTest.py file with a new name (it will be needed again in the next question).**

\*\*\*\*\*\*\*\*\*\*\*\*\* Module pylintTest

pylintTest.py:26:13: E0001: Missing parentheses in call to 'print'. Did you mean print(encoded)? (<unknown>, line 26) (syntax-error)

1. **Exploring Linters to Support Testing in Python: Question 3**

Run *flake8* on pylintTest.py

* Review the errors returned. In what way does this error message differ from the error message returned by *pylint*?

The distinction between flake8 and pylint is that the former also includes complexity analysis.