

Refer to the Mertz (2019) resource. Use some Python code which you have developed in the past and apply at least 3 of the strategies presented at the source to improve its quality. You can use the Jupyter Notebook workspace in Codio and save your work to your GitHub repository.

Below is code I had previously written for practice:

```
1  class Fun:
2      cnt = 0
3
4      def __init__(self):
5          print(Fun.cnt)
6
7      def inc(self):
8          Fun.cnt+=1
9          print(Fun.cnt)
10
11
12  amy = Fun()
13  michael = Fun()
14  charmaine = Fun()
15  Johan = Fun()
16
17
18  for object in (amy, michael, charmaine, Johan):
19      object.inc()
```

The three strategies used to improve the code quality:

1. Use an Integrated Development Environment (IDE). In this case Visual Studio Code (Mertz, 2019).
2. Use a style guide (Mertz, 2019). PEP8 in this instance (Python Software Foundation, N.D).
3. Add documentation in various forms e.g. good variable names, doc strings (Mertz, 2019).

```

1  '''This module implements the Fun data structure where various users
2  |   can work as a team on a single shared object.
3  |   '''
4  |
5  class Fun:
6  |   ''' The class represents a shared fun value cnt
7  |   |   and activities to do with it.
8  |   |   '''
9  |
10 |   cnt = 0
11 |
12 |   def __init__(self):
13 |   |   print(Fun.cnt)
14 |
15 |   def increment(self):
16 |   |   '''Increments class variable cnt'''
17 |   |   Fun.cnt+=1
18 |   |   print(Fun.cnt)
19 |
20 |
21 |   #Main control flow begins here
22 |   amy = Fun()
23 |   michael = Fun()
24 |   charmaine = Fun()
25 |   Johan = Fun()
26 |
27 |   for object in (amy, michael, charmaine, Johan):
28 |   |   object.inc()
29 |

```

References:

Mertz, J. (2019) Writing Clean and Pythonic Code. Jet Propulsion Laboratory California Institute of Technology.

Python Software Foundation (N.D) PEP 8 – Style Guide for Python Code. Available from: <https://peps.python.org/pep-0008/#blank-lines> [Accessed 1 July 2023].