

**ANL252**

**PYTHON FOR DATA ANALYTICS**

# **Tutor-Marked Assignment**

**July 2023 Presentation**

**Submitted by:**

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**Question 1(a)**

Plagiarism happens in the education setting. A person may plagiarize intentionally or unintentionally, and it is up to the individual to ensure that it does not happen.

In coding, there are several tendencies why plagiarism may happen.

* Codes are readily available and easy to source. A quick search on the internet will lead to quite a few libraries of ready codes. It would then be tempting to use them as an answer. Rather than attempt to use them, an individual may learn from them or simply take reference.
* Plagiarism is a quick and convenient way derive at an answer.
* A student may be somewhat lacking in the understand of coding and therefore succumb to plagiarism
* In coding, parts of the code may be plagiarized and disguised so that it passes off as an original work.

According to Bailey (2017), there are three ways to prevent plagiarism in coding.

* Coding in a cleanroom is the first recommended method. All input of code, text or idea is not referenced or copied, and when referencing or copying does happen, a citation is immediately entered.
* Commending on the code thoroughly is the second recommendation. Through commenting on the code, it shows the reader the writer’s understanding on the subject.
* Using original variable names is the last recommendation. Although changing variable names on codes that have been copied does not mean that there is no plagiarism, it helps in making coding simpler and more unique for the writer.

**Question 2**

When running the code in its current form, the first line that is printed is as such:

We have a list of products here: ['Laptop', 'mouse', 'webcam', 'keyboard', 'speaker'].

For product listing, the readability is affected when the products are presented in a single line. Moreover, the lines are printed with the square brackets and inverted commas as per coding language. This is not natural to the reader and may confuse them.

For better readability, the list should be presented in a list. To achieve this, 2 lines are added in lines 6 and 7 as such:

for i in products:  
 print(i)

This changes the output to look like the below:

We have a list of products here:

laptop

mouse

webcam

keyboard

speaker

Upon continuation on testing the output, the following print occurs:

Hello! What do you want to buy?laptop

How much is it (in SGD)?2000

Would you like to continue? (yes/no)yes

Hello! What do you want to buy?mouse

How much is it (in SGD)?10

Would you like to continue? (yes/no)no

This is our updated shopping list: [['laptop', '2000'], ['mouse', '10']]

To further improve the reliability, there are a few improvements that can be made. Firstly, the prices should be automatically calculated once a selection is made, instead of having to type in the price manually. Second, adding an option for quantity would also reduce errors when adding multiple of the same selection.

**References**

Bailey, J. (2017, November 8). Plagiarism and Programming: How to Code Without Plagiarizing. Turnitin. Retrieved September 12, 2023, from https://www.turnitin.com/blog/plagiarism-and-programming-how-to-code-without-plagiarizing-2