

# Faculty of Computer Studies TM112 Introduction to Computing and Information Technology 2 Fall 2019/2020

Tutor-Marked As	ssignment
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Cut-Off Date: TBA

Total Marks: 40

#### **Plagiarism Warning:**

As per AOU rules and regulations, all students are required to submit their own TMA work and avoid plagiarism. The AOU has implemented sophisticated techniques for plagiarism detection. You must provide all references in case you use and quote another person's work in your TMA. You will be penalized for any act of plagiarism as per the AOU's rules and regulations.

# Declaration of No Plagiarism by Student (to be signed and submitted by student with TMA work):

I hereby declare that this submitted TMA work is a result of my own efforts and I have not plagiarized any other person's work. I have provided all references of information that I have used and quoted in my TMA work.

Name of Student:
Signature:
Date:

## **Question 1:(20 marks)**

As the number of internet-connected devices hit the roof of billions, the protection of data, preventing it from falling into the wrong hands, and keeping it secure is an increasingly important part of any organization's ability to manage and protect critical and confidential information.

In this regard, you are asked to do some research, and write a report that answers the following points:

You should tackle the following points:

- 1. What is Data loss prevention (DLP)? What is the DLP role?
- 2. There are three common unintentional data loss themes, which are people, technology and process. List two examples of each theme that causes data loss.
- 3. Discuss briefly three general causes of data loss.
- 4. List three techniques that are commonly used for Data Loss Prevention.
- 5. In the light of what you have read about DLP and its importance, what do you conclude?

### **Report Writing:**

You should follow the following guidelines while writing your report:

- > Your report should be between 400 and 500 words in length.
- Ensure that your report has an appropriate structure and writing style.
- > Your report should include at least one figure/table.
- You should include the references (at least two).

# **Question 2:(20 marks)**

Turtle Graphics is a Python feature like a drawing board, which lets us command a turtle to draw all over it! We can use functions like forward(...) and right(...) which can move the turtle around. Commonly used turtle methods are found in the posted pdf file "turtle — Turtle graphics — Python 3.7.1rc1 documentation"

To make use of the turtle methods and functionalities, we need to import turtle. "turtle" comes packed with the standard Python package and need not be installed externally. The roadmap for executing a turtle program follows 3 steps:

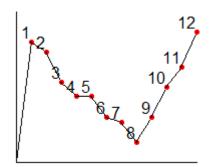
- 1. Import the turtle module
- 2. Create a turtle to control.
- 3. Draw around using the turtle methods.

#### **Problem:**

Suppose that we have the below lists that represent the month of the year and the coats sales.

The manager wants a graph that shows the progress of sales throughout the year.

Based on what you have learned in this course and using the appropriate commands, you are asked to <u>Design the algorithm</u> and <u>implement a python program</u> that draws the below diagram using the turtle.



You should consider the following points in your solution:

- 1- The x-axis has a length of 180 units, while the y-axis is 150 units.
- 2- When you are plotting the values, make sure to multiply the value of the month by 15 in order to make an acceptable distance between the dots. The value of the sales should remain the same.
- 3- The dots should be in red.
- 4- Over each dot, you need to write the number of the month.
- 5- In your graph, you should hide the turtle prompt.
- 6- Make sure to set properly the starting position (x & y) of your drawing, to maintain the above diagram.

End of Assessment