**Learning Outcome:**

By the end of this practical, student will able to:

Construct a software application using the Python programming language (CLO1, P3, PLO3).

**Instructions:**

Answer ALL the questions given. Students need to discuss in groups of two (2) and upload the findings of the discussion in report and .py file through CIDOS. Students will be accessed according to the Rubric given.

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| **CODE / COURSE** | **DFN40323 PROGRAMMING ESSENTIALS IN PYTHON** | **PRACTICAL TASK** | **3** |
| **PROGRAM / CLASS** | **DDT4** | **DURATION** | **3 HOURS** |
| **STUDENT’S NAME** | **1) TIVIYAEN ELANGO**  **2) MUHAMMAD AFIQ MUHAIMIN BIN MOHD ZAINI** | **CLO 1** | **P3** |
| **REG. NO.** | **1) 32DDT20F2015**  **2) 32DDT20F2029** | **TOTAL MARKS** | **/75** |
| **LECTURER’S NAME** | **SHARIZAN BINTI ABDUL JAMIL** |

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| **Question 1**  Refer to the coding in **Figure 1**,      **Figure 1**     1. Display the output. 2. Manipulate the coding in **Figure 1** to: 3. Get an input name and temperature (in Celsius) from a user. 4. Construct a function for temperature calculation and evaluation. Return the temperature status to the program.   iii. Construct a function to display all the information (name, temperature, and temperature status).    **(25 marks)** |
| **SOURCE CODE & OUTPUT:**  1(a).  b(i).    b(ii).    b(iii) |

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| **Question 2**  Write a program to accept a number from the user and store first 12 multiples of number in a tuple. (Choose other number from sample output given).      *Sample Output:*      Write a suitable python code based on the previous output and display each output based on the following task:   1. Determine how many items a tuple has. 2. Print item in index 4. 3. Change the item in index 5 to “Python”.   **(25 marks)** |
| **SOURCE CODE & OUTPUT:**  **First Question**    **Output** |
| **Question 3**  Given order dictionary as in **Figure 2**.    **Figure 2**  Write a suitable python code to manipulate the dictionary and display each output based on the following task:   1. add new item “customerPrice: RM 13.90” to the dictionary. 2. change the value of customerID to 5678. 3. remove the last item in the dictionary. 4. clear all the items in the dictionary.   **(25 marks)** |
| **SOURCE CODE & OUTPUT:** |
| **CONCLUSION:**  **So, from this task, we learn on how to use function to make our code cleaner and perfect in the first question, second question we learn on manipulate tuple using various list method as our middleman, lastly on question three, we learn on how to manipulate dictionary and alter the data** |