UNIVERSITY OF WESTMINSTER

INFORMATICS INSTITUTE OF TECHNOLOGY

Informatics Institute of Technology

Business School
Assignment Cover Sheet

Course:	**Foundation Certificate Programme**
Unit Code and Description:	Introduction to Programming in Python – P1
Module Leader:	Mr. Sudharshan Welihinda
Assignment Number:	1
Assignment Type:	**Individual Coursework**
Issue Date:	**15th November 2021**
Hand – in – Date:	**9th December 2021**
Deadline:	**on or before 9.00 AM**
Weighting: **Qualifying mark:**	**40%**

The department is not responsible if an assignment is lost. To cover this eventuality, you are advised to take a photocopy of the assignment OR to ensure you have the means of re-creating it.

1. Procedure for submission:

- Create a folder including your coursework report (In PDF format) and all the python codes. (Python 3.x source codes)
- Name the folder as "**DOC 333 Coursework report – StudnetID**"
  (E.g DOC 333 Coursework report – 20210xxx)
- Then convert your folder to a ZIP file and submit it to the link given in LMS before the deadline (Link will be available under ***Coursework*** section)
- Ensure you submit your ZIP folder on time as per the given deadline else, the submission will be considered as a late submission.
- Check if you are uploading the correct ZIP file as you will be given only ***one chance*** to submit/email. Changes cannot be done.

2. **Penalties for Late Hand In:**
   - If students submit coursework late but within 24 hours (or one working day) of the specified deadline, the work will be marked and will then have 10% of the overall available marks deducted, to a minimum of the pass mark (40%).

   - If students submit coursework more than 24 hours (or one working day) after the specified deadline, they will be given a mark of zero for the work in question.

3. **Exceptional Factors Affecting your Performance:**
   - Students should submit written evidence to the Registrar's Department with a copy to the Module Leader of exceptional circumstances, which they consider having caused them to submit assessments late and for which they do not wish to attract any penalty. These must be handed over/emailed to the Registrar within four working days of the hand-in-date.

- Proper use of Python 3.x coding and language constructs is needed for a better program. You should follow good and proper programming techniques when completing this coursework.

Assignment Brief

Question 1

A group of medical students were monitoring the body temperature of a patient daily basis. Students captured 10 temperature readings in Celsius on a particular day.

1. Write an **Algorithm** to input these ten values and get the average temperature for that day. if the average temperature value is in between 97^0 Fahrenheit and 99^0 Fahrenheit then display the message "Your body temperature is normal…". If it is more than 100.4^0 Fahrenheit then display the message "You have a fever caused by an infection or illness…".

2. Convert the above algorithm (written in part (1)) to a **Python** program to output the desired results.

Question 2

Write a Python program to check whether a given date is valid date or not and to out put the following.

- If the date is valid then the message "Date is Valid" otherwise the message "Date is Invalid".
- If the date is a valid date, then the next date.

Hint:

Follow the following steps. **(NOTE: You are not allowed to use any Python built-in functions.)**

- Get the inputs Year, Month, and Date separately.
- Use selection statements, i.e., if-else statements to check if the Date, Month, and the Year are valid.
- if the date is a valid date, then print the next date (Increment the date).

Sample Test Cases:

	Enter the Year	Enter the Month	Enter the Date	Expected Result	Next Date
Test Case 1	2020	02	30	Date is Invalid	-
Test Case 2	2020	02	29	Date is Valid	01-03-2021
Test Case 3	2021	09	31	Date is Invalid	-
Test Case 4	2021	13	01	Date is Invalid	-
Test Case 5	2021	08	31	Date is Valid	01-09-2021

Deliverables

The following should be submitted.

- A brief report including
  - A description of the problem statement
  - Algorithm you have taken to approach the solution(Except for the Question-2)
  - A table of test cases used to test the programs and the results.
  - Screen shots of the test cases used to test the programs and the results.
- All source code of your solution (.py files)

Note:

- All codes must be written in Python 3.x version.
- A listing of the programs (ensure that your program listing is appropriately commented)
- You should submit the softcopy of the report and the project inclusive of all source code of your solution.
- **DON'T use another student's work or submit someone else's work as your own.**

End of Coursework