CS1010X — Programming Methodology
National University of Singapore

Practical Examination

Time allowed: 2 hours

Instructions (please read carefully):

1. This is **an open-book exam**.
2. You are to do your work without any assistance from another intelligent human being – if found otherwise, you will receive **ZERO** for the practical exam and will be subject to other disciplinary actions.
3. This practical exam consists of <u>**3**</u> questions printed in <u>**6**</u> pages (inclusive of this cover page).
4. The maximum score of this quiz is <u>**32 marks**</u> and you will need to answer all questions to achieve the maximum score. Note that the number of marks awarded for each question **IS NOT** correlated with the difficulty of the question. You are advised to attempt all questions. Even if you cannot solve a question correctly, you are likely to get some partial credit for a credible attempt.
5. Your answers should be submitted on Coursemology.org **BEFORE** the end of the exam. If you have any submissions timestamped with a time after the exam has ended, your submission for that question will not be graded. Remember to **finalize** your submissions before the end of the exam.
6. You will be allowed to run some public tests cases to verify that your submission is correct. Note that you can run the test cases on Coursemology.org up to a <u>**maximum of 5 times**</u> because they are only for checking that your code is submitted correctly. You are expected to test your own code for correctness using IDLE and not on Coursemology.org. Do however ensure that you submit your answers correctly by running the test cases at least once.
7. You are also provided with the template `practical-template.py` to work with. If Coursemology.org fails, you need to rename your file `practical-<mat_no>.py` where `<mat_no>` is your matriculation number and submit that file by leaving it in your computer.
8. Please note that while sample executions are given, it is not sufficient to write programs that simply satisfy the given examples. Your programs will be tested on other inputs and they should exhibit the required behaviours as specified by the problems to get the allocated credit.
9. Please behave like a good programmer to make your codes readable with good naming convention for the variables and function names. We have allocated small credit to grade the style and use of data structure.

GOOD LUCK!