

**This lab is to be completed at home and is due:**

**Due Time: Friday, Jan 10, 11:59 PM EST**

Plagiarism is the presentation of someone else's work as your own. Any help you get to complete this assignment should be general guidance only, submitting work that is completed or directly influenced by a third party or information copied from the internet is considered plagiarism. Plagiarism will result in an academic misconduct which will result in a zero in the work completed or a zero in the course.

- This assignment is to be completed individually and must be uploaded before the due date/time.
- Solutions must be based upon concepts studied in this course, do not use constructs beyond the scope of this course.
- To complete this lab, please refer to Module 1 Jupyter Notebook and chapter 1 of your textbook.
- There will be 10 graded assignments/labs in total, each assignment is worth 2% of course marks.
- Submit your solution as **.ipynb file** in Blackboard.
- Submission pattern: **First Name\_LastName\_Lab01.ipynb**

**Lab 01: Fuel Cost Calculator****(4 points)**

**Scenario:** You are planning a family road trip and want to calculate the total fuel cost.

**Tasks:** Input the following details:

- Total distance of the trip in kilometers
- Fuel efficiency of the vehicle in kilometers per liter (km/L)
- Current fuel price per liter

Calculate the total fuel required for the trip and the total cost of the fuel. Convert the total cost into a foreign currency using a fixed exchange rate (e.g., CAD to USD, 1 CAD = 0.80 USD). Display all inputs and results in a clear and organized format. Answers should include two decimal places.

**Note:** Please use proper documentation/comments in your code to make it readable. In case of missing comments/documentation, a penalty of 25% scores will be applied.

**Grading Rubric based upon solution functionality.**

Solution Level	Very poor functionality	Poor functionality	OK functionality	Good functionality	Very good functionality
Grade range	0-20%	20-40%	40-60%	60-80%	80-100%

**Grading guidelines**

- Wrong file format uploaded 0%
- Late submission – 0%
- Submission by emails: 0%