**[ Laboratory No. 1.3:** **E-Car Battery Monitoring]**

**Objectives:**

1. To know the basics about Python Programming and its concepts
2. To create a program that takes input from the user and display necessary information as required

**Materials:**

1. PC or Laptop
2. Python Package Development Kit
3. Pycharm or any IDE

**Background**

**Instructions:**

1. Create class **ECar*[Surname]***
2. **Problem Scenario**

Electronic vehicles are becoming rampant nowadays because of its environment friendly benefits. One problem they seem to observe for the owners is the monitoring of how much exact percentage of battery charge will the owner be needing per destination. The consumption is based on kilograms’ load and distance travelled. You seemed to be very optimistic on helping them, thus you are very eager to develop a program that foresee and monitor battery consumptions of a car or vehicle.

**Each km travel on a normal load (0) is thrice the distance to be consumed** or should be reduced from your vehicle’s battery charge. While **twice the mass (kg) of the load per km travelled** diminishing value. How much amount of battery charge, allowable distance and kg needed for each vehicle for each destination?

1. **Input**

Input consist 1 integer percentage for car battery charge and 3 values float values: distance travelled in km, load weight in kg, and vehicle’s capacity or **Gross vehicle weight rating(GVWR)** in pounds (lbs) where **1 kg= 2.20462262**

1. **Constraints**

0 ≤ battery charge(percentage) ≤100

3,000.00 ≤ GVWR (lbs) ≤10,000.00

0.1 ≤ Distance (km) ≤ ∞

**0** ≤ load weight (kg) ≤ GVRW max limits

1. **Output**

Your program should output the battery charge before the travel, GVRW, distance, load weight, and battery charge after the travel.

1. **Source Codes**

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1. **Sample Input/Output**

**NOTE: Provide a screenshot and describe your observation for each action you performed based on the item below:**

* **Input any value for battery charge, gvwr, distance and load between the constraints**
* **Input any battery charge, gvwr, distance and load value NOT between the constraints**
* **Input any value for load more than its gvwr**
* **Input less battery charge with much more required distance and load**

1. **Submit your file with filename convention: ECar*[Surname]***

**Rules:**

1. Each laboratory activity has time limit of 1:30 minutes and is due on the day depending on the level of difficulty or constraints.
2. Each activity will only last every after 3 days and has deduction of 10 points every day from the day it was given.