

INLS 560 – Lab 2: Company Vehicles

Description

The program will compute and display information for a company which rents vehicles to its customers.

For a specified customer, the program will compute and display the amount of money charged for that customer's vehicle rental.

1. Create a file named CompanyVehicle.py
2. The program will prompt the user to enter the following four items for a given customer (in the specified order):
 - a. The customer's classification code (a string)
 - b. The number of days the vehicle was rented (an integer)
 - c. The vehicle's odometer reading at the start of the rental period (an integer)
 - d. The vehicle's odometer reading at the end of the rental period (an integer)
3. The program will compute the amount of money that the customer will be billed, based on the customer's classification code, number of days in the rental period, and number of miles driven.

The program will recognize upper case letters for the classification codes.

Classification Codes

Code 'B' (budget)

base charge: \$40.00 for each day

mileage charge: \$0.25 for each mile driven

Code 'D' (daily)

base charge: \$60.00 for each day

mileage charge: no charge if the average number of miles driven per day is 10 miles or less; otherwise, \$0.25 for each mile driven above the 10 mile per day limit.

The amount billed to the customer is the sum of the base charge and the mileage charge.

4. The program will compute the number of miles driven by the customer during the rental period.

The odometer readings are taken from an odometer which has six digits.

5. For each customer, the program will display a summary with the following information:

a. The customer's classification code

b. The number of days the vehicle was rented

c. The vehicle's odometer reading at the start of the rental period

d. The vehicle's odometer reading at the end of the rental period

e. The number of miles driven during the rental period

f. The amount of money billed to the customer for the rental period

All output will be appropriately labeled and formatted. The number of miles driven will be rounded to one fractional digit. The amount of money billed will be displayed with a dollar sign and will be two fractional digits (for example, \$125.90 or \$43.87).

Sample Interactions (Green is user input)

```
Please enter the customer's classification code: B
Please enter the number of days the vehicle was rented: 3
Please enter the beginning odometer reading: 1000
Please enter the ending odometer reading: 1025
The classification code is: B
The number of days the vehicle was rented is: 3
The vehicle's odometer reading at the start of the rental period: 1000
The vehicle's odometer reading at the end of the rental period: 1025
Number of miles driven during rental period: 25
Amount billed to customer: $ 126.25
```

```
Please enter the customer's classification code: D
Please enter the number of days the vehicle was rented: 2
Please enter the beginning odometer reading: 1000
Please enter the ending odometer reading: 2000
The classification code is: D
The number of days the vehicle was rented is: 2
The vehicle's odometer reading at the start of the rental period: 1000
The vehicle's odometer reading at the end of the rental period: 2000
Number of miles driven during rental period: 1000
Amount billed to customer: $ 367.50
```

Extra:

Add classification code W

Code 'W' (weekly)

base charge: \$190.00 for each week (or fraction of a week) week is 7 days

mileage charge: no charge if the average number of miles driven per week is 90 miles or less; \$10.00 per week if the average number of miles driven per week exceeds 90 miles but does not exceed 150 miles; otherwise, \$20.00 per week plus \$0.25 for each mile driven above the 150 mile per week limit.