Laptop Battery Life ★

Points: 98.53 Rank: 21158

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Fred is a very predictable man. For instance, when he uses his laptop, all he does is watch TV shows. He keeps on watching TV shows until his battery dies. Also, he is a very meticulous man, i.e. he pays great attention to minute details. He has been keeping logs of every time he charged his laptop, which includes how long he charged his laptop for and after that how long was he able to watch the TV. Now, Fred wants to use this log to predict how long will he be able to watch TV for when he starts so that he can plan his activities after watching his TV shows accordingly.

Challenge

You are given access to Fred's laptop charging log by reading from the file "trainingdata.txt". The training data file will consist of 100 lines, each with 2 comma-separated numbers.

1. The first number denotes the amount of time the laptop was charged.
2. The second number denotes the amount of time the battery lasted.

The training data file can be downloaded here (this will be the same training data used when your program is run). The input for each of the test cases will consist of exactly 1 number rounded to 2 decimal places. For each input, output 1 number: the amount of time you predict his battery will last.

Sample Input

1.50

Sample Output

3.00

Scoring

Your score will be 10-X, where X is the sum of the distances you are from expected answer of each test case. For instance if there are 2 test cases with expected answer 4 and you print 3 for the first one and 6 for the second one your score will be 10-(1+2) = 7.

Change Theme Language Python 3 ⌄

```python
import sys
import pandas as pd
from sklearn import linear_model
if __name__ == '__main__':
    timeCharged = float(input().strip())

    dataset = pd.read_csv('trainingdata.txt', header=None)
    dataset = dataset[dataset.iloc[:,1] < 8]

    dataset.insert(0, len(dataset.columns), 0)

    X = dataset.iloc[:,0:2]
    Y = dataset.iloc[:,2]

    model = linear_model.LinearRegression()
    model.fit(X, Y)

    result = model.predict([[0, timeCharged]])
    if result[0] > 8:
        print (8.0)
    else:
        print (round(result[0],2))
```

Line: 23 Col: 1

⬆ Upload Code as File

☐ Test against custom input

Run Code

Submit Code

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

⊘ **Sample Test case 0**

Compiler Message

Success

Input (stdin)   Download

1   0.09

Your Output (stdout)

1   0.18

Expected Output   Download

1   0.18