Project 1

Due Date: 20th February 2021 (11: 59PM)

InternetLite Corporation is an Internet service provider that charges customers a flat rate of $7.99 for up to 10 hours of connection time. Additional hours or partial hours are charged at $1.99 each. Write a function charges that computes the total charge for a customer based on the number of hours of connection time used in a month. The function should also calculate the average cost per hour of the time used (rounded to the nearest cent), so use two output parameters to send back these results.

Write a second function round_money that takes a real number as an input argument and returns as the function value the number rounded to two decimal places. Write a main function that takes data from an input file usage.txt and produces an output file charges.txt .

The data file format is as follows:

Line 1: current month and year as two integers
Other lines: customer number (a 5-digit number) and number of hours used
Here is a sample data file and the corresponding output file:

Data file `usage.txt`

```
10 2009
15362   4.2
42768   11.1
11111   9.9
```

Output file `charges.txt`

```
Charges for 10/2009
```

Customer	Hours used	Charge per hour	Average cost
15362	4.2	7.99	1.90
42768	11.1	11.97	1.08
11111	9.9	7.99	0.81