

Programming in Java - Assignment 1

Let's write a program for a car agency called Vroom. First, we have to see if the customer would like to buy or rent a car. If the user wants to buy a car, the agency has three different cars to offer. A Toyota, a Ford, and a Ferrari. The user can choose the car he/she wants and the program will end. If the user wants to rent a car, he/she has to enter the number of days he/she needs the car and the totalRent will be calculated based on the following formula:

$$\text{totalRent} = 3.5 * (\text{number of days})^2 / 2$$

If the number of days is less than or equal to zero, it should prompt a message that the number is not accepted. You should at least use one **if** or **if/else** statement and one **Switch** statement. For the power, you should use the *pow()* function from the Math library. For the power, you should use the *pow()* function from the Math library.

See the following images:

```
*** Welcome to Vroom! ***
Buy or rent a car? Enter B for buying, R for renting.
B
So you're here to Buy!
We have three different cars available:
1- Toyota, 12K
2- Ford, 25K
3- Ferrari, 100K
Which one do you want?
2
You got the Ford!
Bye !!
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*** Welcome to Vroom! ***
Buy or rent a car? Enter B for buying, R for renting.
b
So you're here to Buy!
We have three different cars available:
1- Toyota, 12K
2- Ford, 25K
3- Ferrari, 100K
Which one do you want?
9
Oops! We don't have that option!
Bye !!
-----
```

*** Welcome to Vroom! ***

Buy or rent a car? Enter B for buying, R for renting.

r

So you're here to Rent!

For how many days do you need a car?

5

Total rent is: C\$43.75

Bye !!

*** Welcome to Vroom! ***

Buy or rent a car? Enter B for buying, R for renting.

r

So you're here to Rent!

For how many days do you need a car?

-2

Number of days can't be zero or negative

Bye !!

*** Welcome to Vroom! ***

Buy or rent a car? Enter B for buying, R for renting.

m

You didn't enter B or R and we don't offer any other services!

Bye !!