

# Problem J1: Speed fines are not fine!

## Problem Description

Many communities now have “radar” signs that tell drivers what their speed is, in the hope that they will slow down.

You will output a message for a “radar” sign. The message will display information to a driver based on his/her speed according to the following table:

km/h over the limit	Fine
1 to 20	\$100
21 to 30	\$270
31 or above	\$500

## Input Specification

The user will be prompted to enter two integers. First, the user will be prompted to enter the speed limit. Second, the user will be prompted to enter the recorded speed of the car.

## Output Specification

If the driver is not speeding, the output should be:

`Congratulations, you are within the speed limit!`

If the driver is speeding, the output should be:

`You are speeding and your fine is $ $F$ .`

where  $F$  is the amount of the fine as described in the table above.

## Sample Session 1 (with output shown in text, user input in *italics*)

Enter the speed limit: *40*  
Enter the recorded speed of the car: *39*  
Congratulations, you are within the speed limit!

## Sample Session 2

Enter the speed limit: *100*  
Enter the recorded speed of the car: *131*  
You are speeding and your fine is \$500.

## Sample Session 3

Enter the speed limit: *100*  
Enter the recorded speed of the car: *120*  
You are speeding and your fine is \$100.