

Problem 1:

Write a program that prompts the user for their quarterly water bill for the last four *quarters*. The program should find and output their average *monthly* water bill. If the average bill exceeds \$75, the output should include a message indicating that too much water is being used. If the average bill is at least \$25 but no more than \$75, the output should indicate that a typical amount of water is being used. Finally, if the average bill is less than \$25, the output should contain a message praising the user for conserving water. Use the sample run below as a model for your output. (Your submitted running result must show the following two cases.)

Sample Run 1:

Please input your water bill for quarter 1:

300

Please input your water bill for quarter 2:

200

Please input your water bill for quarter 3:

225

Please input your water bill for quarter 4:

275

Your average monthly bill is \$83.33. You are using excessive amounts of water.

Sample Run 2:

Please input your water bill for quarter 1:

100

Please input your water bill for quarter 2:

150

Please input your water bill for quarter 3:

75

Please input your water bill for quarter 4:

125

Your average monthly bill is \$37.50. You are using a typical amount of water.

Problem 2:

The local t-shirt shop sells shirts that retail for \$12. Quantity discounts are given as follow:

Number of Shirts	Discount
4 or less	0%
5 ~ 10	10%
11 ~ 20	15%
21 ~ 30	20%
31 or more	25%

Write a program that prompts the user for the number of shirts required and then computes the total price. Then print the unit price and total price. Make sure the program accepts only nonnegative input.

Use the following sample runs to guide you. Your submitted running result must show the following cases:

Sample Run 1:

How many shirts would you like ?

4

The cost per shirt is \$12 and the total cost is \$48

Sample Run 2:

How many shirts would you like ?

0

The cost per shirt is \$12 and the total cost is \$0

Sample Run 3:

How many shirts would you like ?

8

The cost per shirt is \$10.80 and the total cost is \$86.40

Sample Run 4:

How many shirts would you like ?

-2

Invalid Input: Please enter a nonnegative integer