COUNTER CONTROLLED REPETITION PROBLEMS:

1. Create a program which will produce the following output:

1 steamboat

2 steamboat

3 steamboat

CHARGE!

2. Create a program which will produce a table showing litres to gallons conversions for 20 to 60 litres in increments of 4 litres. (1 gal = 4.545985 litres)

USER CONTROLLED REPETITION PROBLEMS:

- 1. Create a program which repeatedly prompts the user to enter miles and then outputs the equivalent measurement in kilometres. Make sure the miles entered are positive. Recall that 1 mile is equivalent to 1.61 kilometres.
- 2. Write a program which repeatedly prompts the user to enter a length and width and then outputs the area. Challenge: Try to check for invalid length and width entries.
- 3. Write a program which repeatedly accepts a mark and then determines the letter grade to assign it. Letter grades are assigned as follows.

0 <= mark < 50 F 50 <= mark < 60 D 60 <= mark < 70 C 70 <= mark < 80 B 80 <= mark < 100 A

FOR/NEXT PROBLEMS:

- 1. Write a program which sums the numbers 1,2,3,...250
- 2. Write a program which sums all the odd numbers from 27 to 99
- 3. Write a program which find the sum of the squares of the numbers 4,9,14,19,...39
- 4. A delivery service charges its customers based on the weight of the package and the distance it must be shipped. It has divided the area it serves into zones. The company calculates the charge using the equation

$$C = .75 + .03 \times W \times Z$$

Write a program that will print a table of charges for weights of 2,4,6,8 and 10 and zones of 1, 2, and 3.