CSc 110 Assignment 2
(covers Static Methods, Strings, Scanner, For Loops)

Due: Friday Sept. 26, 8 pm

How to hand it in:

Submit CowTalks.java through the assignment 2 link on the CSC110 connex site.

Learning Outcomes:

When you have completed this assignment, you should understand:

- How to use a `for` statement to repeat operations.
- How to write and call a static method.
- How to design, compile, run and check a simple and complete Java program on your own.
- How to input data from the console
- How to use String methods
- How to indent and document a Java program.

Instructions for CowTalks:

Write a program called CowTalks.java.

This program will request user input from the command line and then print an ascii cow that "says" the text that is entered. For example, here is the output from running CowTalks and the user typing, "Today is a wonderful day!".

```
alouette:assignment2 melanie$ javac CowTalks.java
alouette:assignment2 melanie$ java CowTalks
What should the cow say?Today is a wonderful day!

*****************************
| Today is a wonderful day! |
*****************************
         \   ^__^
          \  (oo)\_______
             (__)\       )\/\
                  ||----w |
                  ||     ||

alouette:assignment2 melanie$
```

Your program must match the following:

- It must prompt the user to enter some text.
- It must use a Scanner object and the Scanner's nextLine() method to read input from the keyboard.
- It must print out the cow with the user's message, as shown above. To do this, you must:
    - Write and use a static method called printMessage. This method should print out the message and the box around the message.
    - Write and use a static method called printCow. This method should print out the cow.
- You must use `for` loops to print the "****" lines above and below the text. These lines should be exactly 8 characters longer than the message text, as shown in the example above. Hint: use the length() method for a string to find out its length.

Suggestion: Build this code in parts, compiling and running at each point to check that your code works as expected. For example, you might first prompt the user to enter some text, store the text as a string, and then directly print the text back. Then you might write the printCow method. Then you could write the printMessage method. Finally you could add the `for` loops.

Marking:

You will be marked based on the following criteria:

- Your code must compile and run. It must prompt the user, read text input, and produce the expected output as above.
- Your code must conform to the guidelines given above (uses printMessage and printCow methods, a Scanner object, for loops, etc.)
- You must name your java file CowTalks.java
- Your code must adhere to the style guidelines.