**The final keyword**

*We're leaving together,*

*But still it's farewell*

*And maybe we'll come back*

*To earth, who can tell?*

*I guess there is no one to blame*

*We're leaving ground (leaving ground)*

*Will things ever be the same again?*

In previous labs and projects, we have used the 'final' keyword to designate constants--variables whose values cannot be changed.

For example:

final double EPSILON = 0.0001;

Now, try running the following code (remember to include necessary import statements!):

SimpleWriter out = new SimpleWriter1L();

final NaturalNumber THREE = new NaturalNumber1L(3);

THREE.increment();

out.println(THREE);

1. What happens when you try to run this code? Does it fail to run because of errors? Does it start running but crash partway through? If it runs successfully, what is the output?

2. Explain your answer to #1 above. If what happened was what you expected, explain why you expected that. If it was different from what you expected, explain why you think it happened that way.

Now try running the following code:

SimpleWriter out = new SimpleWriter1L();

final String GOOD = "CSE 2221 is awesome";

String BAD = ", NOT!";

GOOD = GOOD + BAD;

out.println(GOOD);

3. What happens when you try to run this code?

4. Explain your answer to #3 above. If the outcome was different from what happened when trying to run the first code sample, explain why.