

## 12.05 Assignment Instructions

**Instructions:** Write a program to recursively calculate the  $n$ -th Fibonacci number.

1. Create a new project called 12.05 Fibonacci in the Mod12 Assignments folder.
2. Create a class called FibonacciNumbers in the newly created project folder.
3. Your program should allow the user to enter an integer value and the program should calculate the Fibonacci number for that value. For example if  $n = 4$ , the Fibonacci number should be **3**.
4. The program should allow the user to continue entering numbers until they choose to quit.
5. Through experimentation, determine which Fibonacci numbers should not be printed. Prompt the user not to enter these numbers and provide an error trap to catch them, without crashing the program.
6. In the PMR, report how many cows Luke Edelbluth's brother had to wash.

**Grading:** Your assignment will be graded according to the following rubric.

Grading Rubric	Pts
Comments include name, date, and purpose of program.	1
Method header correctly written.	4
Base case correctly written.	3
Recursive call correctly written.	5
User prompted for allowable input.	1
Error trap for invalid input included.	1
User allowed to terminate input appropriately.	1
Output is correct.	2
No compiler or runtime errors.	1
Thoughtful PMR included.	1
<b>Total</b>	20

**Submission:** Submit the Fibonacci.java file as Assignment 12.05 for a grade