### **Computing Powers**

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| Computing a positive integer power of a number is easily seen as a recursive process. Consider an:  · If n = 0, an is 1 (by definition)  · If n > 0, an is a \* an–1  File *Power.java* contains a main program that reads in integer’s *base* and *exp* and calls method *power* to compute *baseexp*. Fill in the code for *power* to make it a recursive method to do the power computation. The comments provide guidance. |

### **Sum of Naturals**

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| Create a program that has two static methods, one named NaturalsRecursion and the other named NaturalsIteration. The methods are to receive an integer and returns the sum of all natural numbers up to that number. Obviously the NaturalsRecursion method uses recursion and the NaturalsIteration method uses iteration(a for loop). If your method is sent the number 6 it would compute 6 + 5 + 4 + 3 + 2 + 1 = 21. |