

Computing Powers

Computing a positive integer power of a number is easily seen as a **recursive** process.

Consider x to the power n :

* If $n = 0$, x to the power n is 1 (by definition)

* If $n > 0$, x to the power n is $x \cdot (x \text{ to the power } n - 1)$

File **Power.java** contains a main program that reads in integers **base** and **exp** and calls method **power** to compute **base** to the power **exp**. Fill in the code for **power** to make it a recursive method to do the power computation.