**Day 17: More Exceptions**

**Task**  
Write a *Calculator* class with a single method: *int power(int,int)*. The *power* method takes two integers, n and p, as parameters and returns the integer result of np. If either n or p is negative, then the method must throw an exception with the message: n and p should be non-negative.

**Note:** Do not use an access modifier (e.g.: public) in the declaration for your *Calculator* class.

**Input Format**

Input from stdin is handled for you by the locked stub code in your editor. The first line contains an integer, T, the number of test cases. Each of the T subsequent lines describes a test case in 2 space-separated integers denoting n and p, respectively.

**Constraints**

* No Test Case will result in overflow for correctly written code.

**Output Format**

Output to stdout is handled for you by the locked stub code in your editor. There are  lines of output, where each line contains the result of np as calculated by your *Calculator* class' *power* method.

**Sample Input**

4

3 5

2 4

-1 -2

-1 3

**Sample Output**

243

16

n and p should be non-negative

n and p should be non-negative