



Practice ▾ Tutorials ▾ 30 Days of Code ▾ Day 17: More Exceptions

COMPETE

JOBS

LEADERBOARD

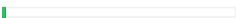
4 more challenges to get your next star!

Days of  
Code



joel\_h\_healy ▾

0%



Your Day 17: More Exceptions submission got 30.00 points. [Share](#)

[Tweet](#)

You are now 4 challenges away from the 4th star for your 30 days of code badge.

[Try the Next Challenge](#) | [Try a Random Challenge](#)

# Day 17: More Exceptions ▾

by [Shafaet](#)

Problem

Submissions

Leaderboard

Discussions

Editorial ▾

Tutorial

### Objective

Yesterday's challenge taught you to manage exceptional situations by using *try* and *catch* blocks. In today's challenge, you're going to practice throwing and propagating an exception. Check out the [Tutorial](#) tab for learning materials and an instructional video!

### Task

Write a *Calculator* class with a single method: *int power(int,int)*. The *power* method takes two



Submitted 52199 times  
Max Score 30

Need Help?

integers, and , as parameters and returns the integer result of . If either or 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, , the number of test cases. Each of the subsequent lines describes a test case in space-separated integers denoting and , 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 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
```

Explanation

- : and are positive, so *power* returns the result of , which is .
- : and are positive, so *power* returns the result of =, which is .
- : Both inputs ( and ) are negative, so *power* throws an exception and is printed.
- : One of the inputs ( ) is negative, so *power* throws an exception and is printed.

 [View Tutorial](#)

 [View Discussions](#)

 [View Editorial Solution](#)

 [View Top Submissions](#)

Rate This Challenge:

☐ ☐ ☐ ☐ ☐

- [Download problem statement](#)
- [Download sample test cases](#)
- [Suggest Edits](#)



Current Buffer (saved locally, editable)

Python 3




```
1 #Write your code here
2 class Exception(BaseException):
3     def __init__(self, str):
4         self.str_name = str
```

```
5
6 def __repr__(self):
7     return self.str_name
8
9
10 class Calculator():
11     def power(self, n, p):
12         if n < 0 or p < 0:
13             raise Exception("n and p should be non-negative")
14         else:
15             result = 1
16             for i in range(p):
17                 result = result * n
18             return result
19
20 myCalculator=Calculator()
21 T=int(input())
22 for i in range(T):
23     n,p = map(int, input().split())
24     try:
25         ans=myCalculator.power(n,p)
26         print(ans)
27     except Exception as e:
28         print(e)
```

Line: 7 Col: 29

☐ [Upload Code as File](#)    ☐ Test against custom input    [Run Code](#)

**Congrats, you solved this challenge!**

Challenge your friends:   

☒ Test Case #0                      ☐ Test Case #1

You've earned 30.00 points. You are now 4 challenges away from the 4th star for your 30 days of code badge.

[Next Challenge](#)

