

PROBLEM 4 (10 points possible)

Write a simple procedure, `myLog(x, b)`, that computes the logarithm of a number x relative to a base b . For example, if $x = 16$ and $b = 2$, then the result is 4 - because $2^4 = 16$. If $x = 15$ and $b = 3$, then the result is 2 - because 3^2 is the largest power of 3 less than 15.

In other words, `myLog` should return the largest power of b such that b to that power is still less than or equal to x .

x and b are both positive integers; b is an integer greater than or equal to 2. Your function should return an integer answer.

Do **not** use Python's `log` functions; instead, please use an iterative or recursive solution to this problem that uses simple arithmetic operators and conditional testing.

Note: You will only get **ten** checks. Use these judiciously.

```
1 def myLog(x, b):
2     '''
3     x: a positive integer
4     b: a positive integer; b >= 2
5
6     returns: log_b(x), or, the logarithm of x relative to a base b.
7     '''
8     # Your Code Here
9
```

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You have used 0 of 10 submissions





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