Homework 4:
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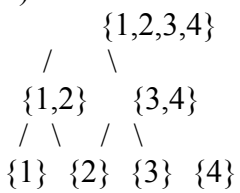
Question 1:
Steps:
1). Template function with Iteration, UnaryPred, Unaryop
2). Declare variable how_many
3). Loop from start iterator to end iterator

preconditions:
Assume that the start and end iterator aren't the equal
Postconditions:
Returns a number of how many time an operation is performed.

BigOh is O(n)

Question 2:
a).
(30,42),
(42,30),
(30,12),
(12,6)
(6,0)
b).

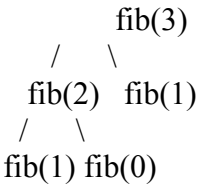


Question 3:
a) itrStart = 1, itrMid = n/2
b) itrMid = (n/2)+1, itrEnd = n

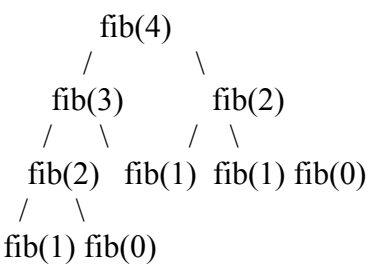
Question 4:
a)
4: 2: 1: 0: 0:
1: 0: 0:
*
2: 1: 0: 0:
1: 0: 0:
*
***
b). O(nlog(n))
Question 5:

n = 3 it has 5 calls.
n=4 it has 9 calls.
n= 5 it has 15 calls.

When n = 3



When n = 4



When n = 5
Since fib(3) is called 5 time and fib(4) is called 9 times then we can state that fib(5) will be 9 + 5 + 1 = 15 calls.