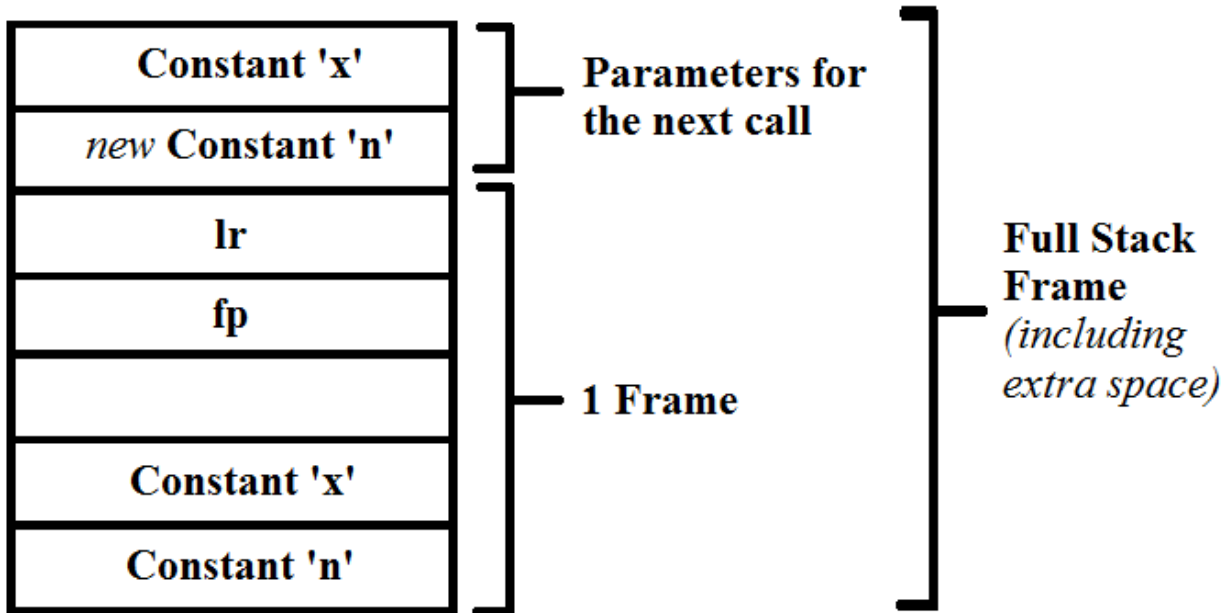7 words = 28 bytes.
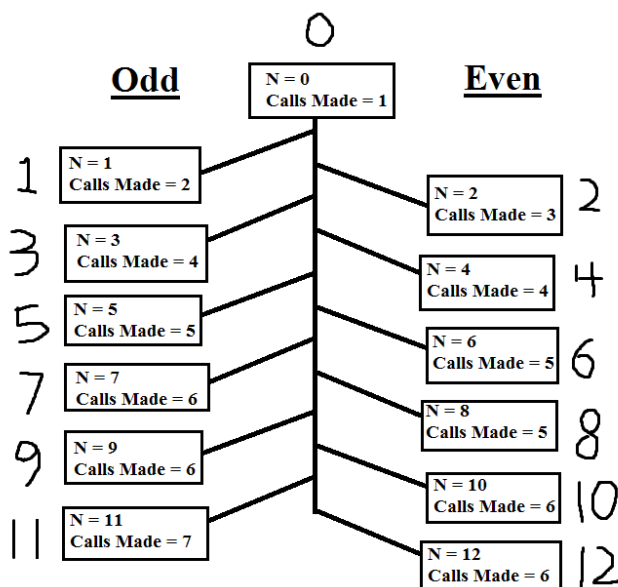28 bytes x (7 words + 1 for extra space) = 228
228 in hexadecimal = 0xE0.

0xE0 space required by my algorithm for the stack

Constant 'x'
new Constant 'n'
lr
fp
Constant 'x'
Constant 'n'

Parameters for the next call

1 Frame

Full Stack Frame
(including extra space)

Assignment Question - Answered

N = 0
Calls Made = 1

Odd

1 — N = 1, Calls Made = 2
3 — N = 3, Calls Made = 4
5 — N = 5, Calls Made = 5
7 — N = 7, Calls Made = 6
9 — N = 9, Calls Made = 6
11 — N = 11, Calls Made = 7

Even

N = 2, Calls Made = 3 — 2
N = 4, Calls Made = 4 — 4
N = 6, Calls Made = 5 — 6
N = 8, Calls Made = 5 — 8
N = 10, Calls Made = 6 — 10
N = 12, Calls Made = 6 — 12

0 = 0
1 = 1, 0
2 = 2, 1, 0
3 = 3, 2, 1, 0
4 = 4, 2, 1, 0
5 = 5, 4, 2, 1, 0
6 = 6, 3, 2, 1, 0
7 = 7, 6, 3, 2, 1, 0
8 = 8, 4, 2, 1, 0
9 = 9, 8, 4, 2, 1, 0
10 = 10, 5, 4, 2, 1, 0
11 = 11, 10, 5, 4, 2, 1, 0
12 = 12, 6, 3, 2, 1, 0

1
2
3
4
4
5
5
5
6
5
6
6
7
6