

Give me a number between 1 and 100 (Type 0 to stop): 3

Give me a second number between

3 and 100 (Type 0 to stop): 12

Adding squares from

3 to 12

ITERATIVE: 9 25 50 86 135 199 280 380 501 645

RECURSIVE: 9 25 50 86 135 199 280 380 501 645

Give me a number between 1 and 100 (Type 0 to stop): 6

Give me a second number between

6 and 100 (Type 0 to stop): 15

Adding squares from

6 to 15

ITERATIVE: 36 85 149 230 330 451 595 764 960 1185

RECURSIVE: 36 85 149 230 330 451 595 764 960 1185

Give me a number between 1 and 100 (Type 0 to stop): 0

-- program is finished running --

Data Segment									
Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)	
0x7fffffa0	0	0	0	12	4194724	11	4194724	10	
0x7fffffc0	4194724	9	4194724	8	4194724	7	4194724	6	
0x7fffffe0	4194724	5	4194724	4	4194724	3	4194580	0	
0x7ffff000	0	0	0	0	0	0	0	0	
0x7ffff020	0	0	0	0	0	0	0	0	
0x7ffff040	0	0	0	0	0	0	0	0	
0x7ffff060	0	0	0	0	0	0	0	0	
0x7ffff080	0	0	0	0	0	0	0	0	
0x7ffff0a0	0	0	0	0	0	0	0	0	
0x7ffff0c0	0	0	0	0	0	0	0	0	
0x7ffff0e0	0	0	0	0	0	0	0	0	
0x7ffff100	0	0	0	0	0	0	0	0	
0x7ffff120	0	0	0	0	0	0	0	0	
0x7ffff140	0	0	0	0	0	0	0	0	
0x7ffff160	0	0	0	0	0	0	0	0	
0x7ffff180	0	0	0	0	0	0	0	0	

In this example, the program is adding the numbers between 3 and 12 inclusive and outputting the cumulative sum of these numbers squared. What I noticed in the stack was that the value at every 8 increments stayed the same but decreased at the first iteration when I went from 3 to 4. I also noticed that the numbers from 3-12 are being shown at the values are being shown every other box every 5.

Data Segment								
Address	Value (+0)	Value (+4)	Value (+8)	Value (+c)	Value (+10)	Value (+14)	Value (+18)	Value (+1c)
0x7fffffa0	0	0	0	15	4194724	14	4194724	13
0x7fffffc0	4194724	12	4194724	11	4194724	10	4194724	9
0x7fffffe0	4194724	8	4194724	7	4194724	6	4194580	0
0x7ffff000	0	0	0	0	0	0	0	0
0x7ffff020	0	0	0	0	0	0	0	0
0x7ffff040	0	0	0	0	0	0	0	0
0x7ffff060	0	0	0	0	0	0	0	0
0x7ffff080	0	0	0	0	0	0	0	0
0x7ffff0a0	0	0	0	0	0	0	0	0
0x7ffff0c0	0	0	0	0	0	0	0	0
0x7ffff0e0	0	0	0	0	0	0	0	0
0x7ffff100	0	0	0	0	0	0	0	0
0x7ffff120	0	0	0	0	0	0	0	0
0x7ffff140	0	0	0	0	0	0	0	0
0x7ffff160	0	0	0	0	0	0	0	0
0x7ffff180	0	0	0	0	0	0	0	0

Similarly, in this example, the program is adding the numbers between 6 and 15 inclusive and outputting the cumulative sum of these numbers squared. What I noticed in the stack was that the value at every 8 increments stayed the same but decreased at the first iteration when I went from 3 to 4. I also noticed that the numbers from 6-15 are being shown at the values are being shown every other box every 5.