

Ex. 0.1

Step 1 and 2 (First two assignments)

Possible Memory Address	Memory Contents	Variable Name	Memory Portion
4026	9864	x	Stack
	10402	y	
	.		
	.		Heap
	.		
9864	2	x[0]	
	5	x[1]	
	5	x[2]	
	.		
	.		
	.		
10402	3	y[0]	
	7	y[1]	
	3	y[2]	
	.		
	.		
	.		

Step 3: double[] temp = x;

Possible Memory Address	Memory Contents	Variable Name	Memory Portion
4026	9864	x	Stack
	10402	y	
	9864	temp	
	.		
9864	2	x[0] and temp[0]	Heap
	5	x[1] and temp[1]	
	5	x[2] and temp[2]	
	.		
10402	3	y[0]	
	7	y[1]	
	3	y[2]	
	.		

Step 4: x = y

Possible Memory Address	Memory Contents	Variable Name	Memory Portion
4026	10402	x	Stack
	10402	y	
	9864	temp	

	.		Heap
	.		
	.		
9864	2	temp[0]	
	5	temp[1]	
	5	temp[2]	
	.		
	.		
	.		
10402	3	y[0] and x[0]	
	7	y[1] and x[1]	
	3	y[2] and x[2]	
	.		
	.		

Step 5: y = temp;

Possible Memory Address	Memory Contents	Variable Name	Memory Portion
4026	10402	x	Stack
	9864	y	
	9864	temp	
	.		
	.		Heap
	.		
9864	2	y[0] and temp[0]	
	5	y[1] and temp[1]	
	5	y[2] and	

		temp[2]	
	.		
	.		
	.		
10402	3	x[0]	
	7	x[1]	
	3	x[2]	
	.		
	.		
	.		

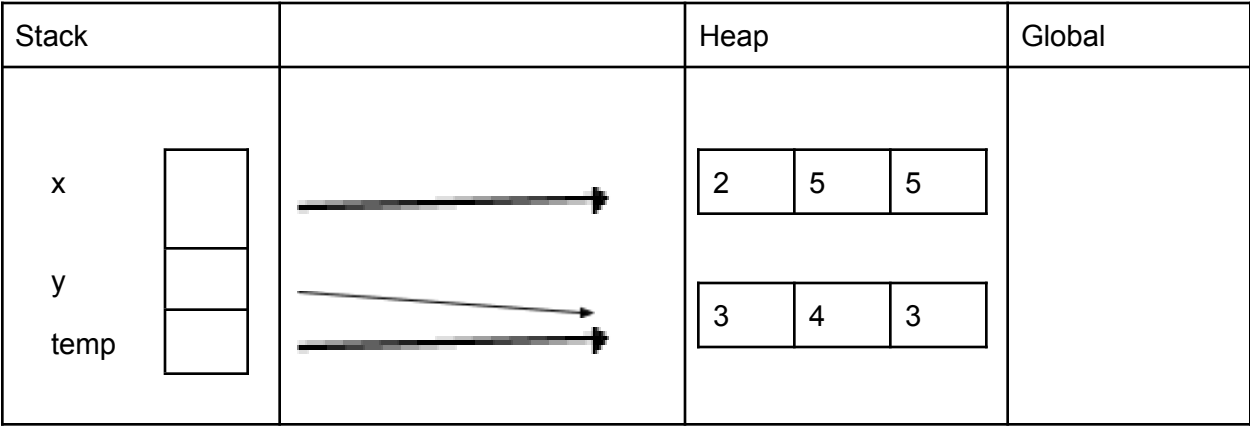
Step 6: x[1] = 4;

Possible Memory Address	Memory Contents	Variable Name	Memory Portion
4026	10402	x	Stack
	9864	y	
	9864	temp	
	.		
	.		Heap
	.		
9864	2	y[0] and temp[0]	
	5	y[1] and temp[1]	
	5	y[2] and temp[2]	
	.		
	.		
10402	3	x[0]	
	4	x[1]	
	3	x[2]	

	.		
	.		
	.		

Ex. 0.3

The state of memory right before the println command (the last diagram in Ex. 01):



Ex. 0.5

Printed is

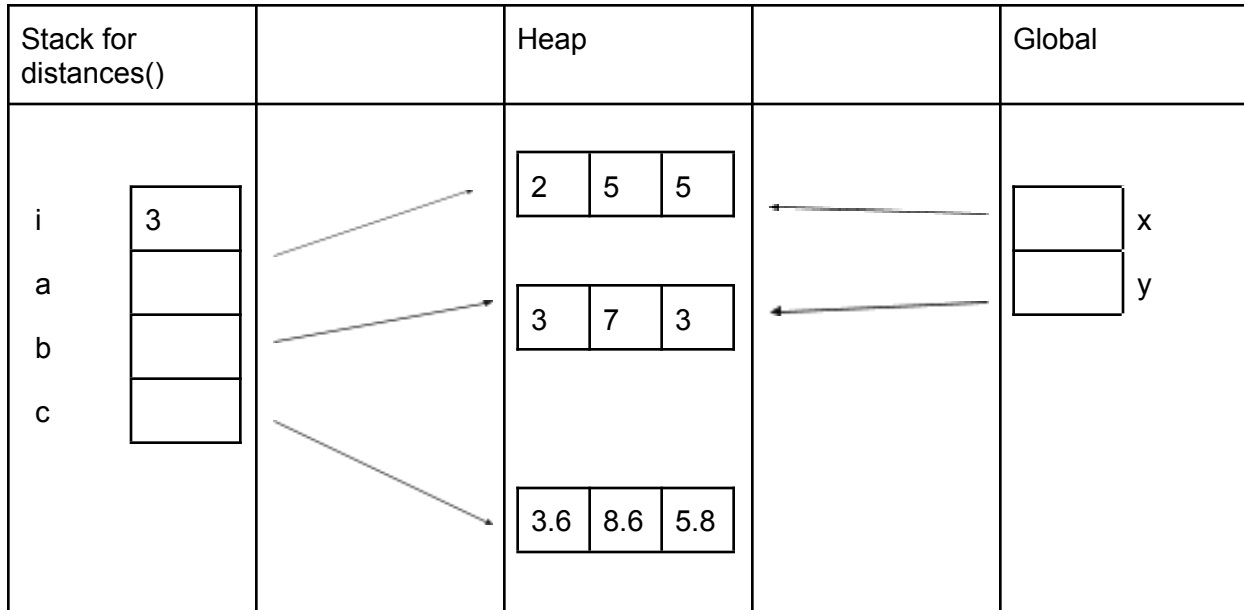
[3.605551275463989, 8.602325267042627, 5.830951894845301]

Ex. 0.6

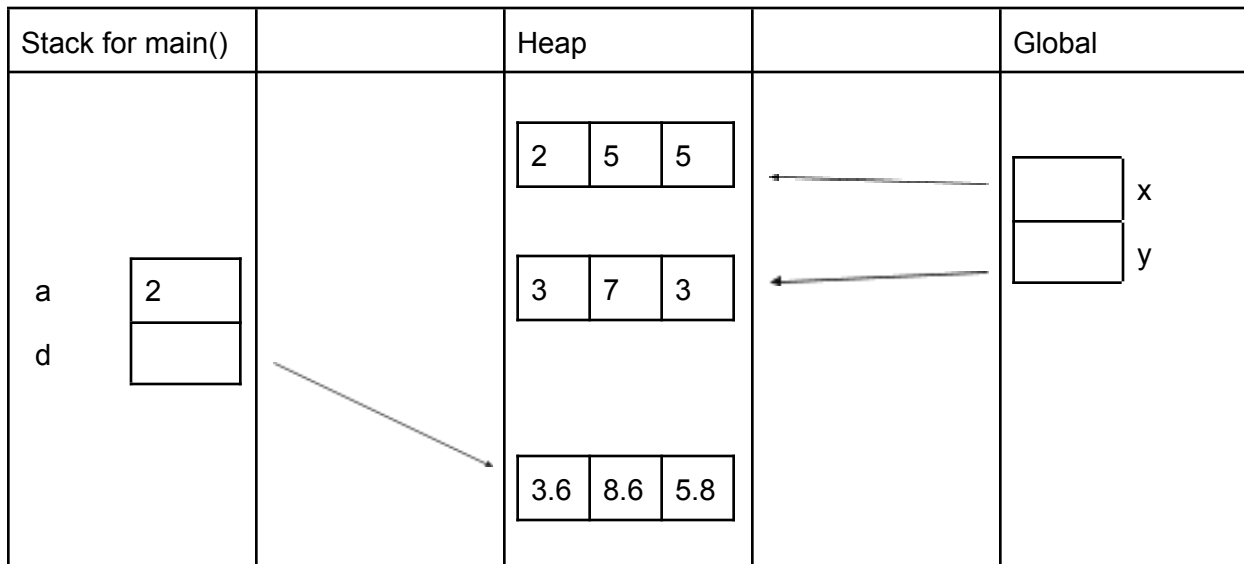
After the last element of the c array is filled, the value inside i is **3**. At this point, the program exits the for loop.

Ex. 0.7

Before distances() returns



Before main() completes



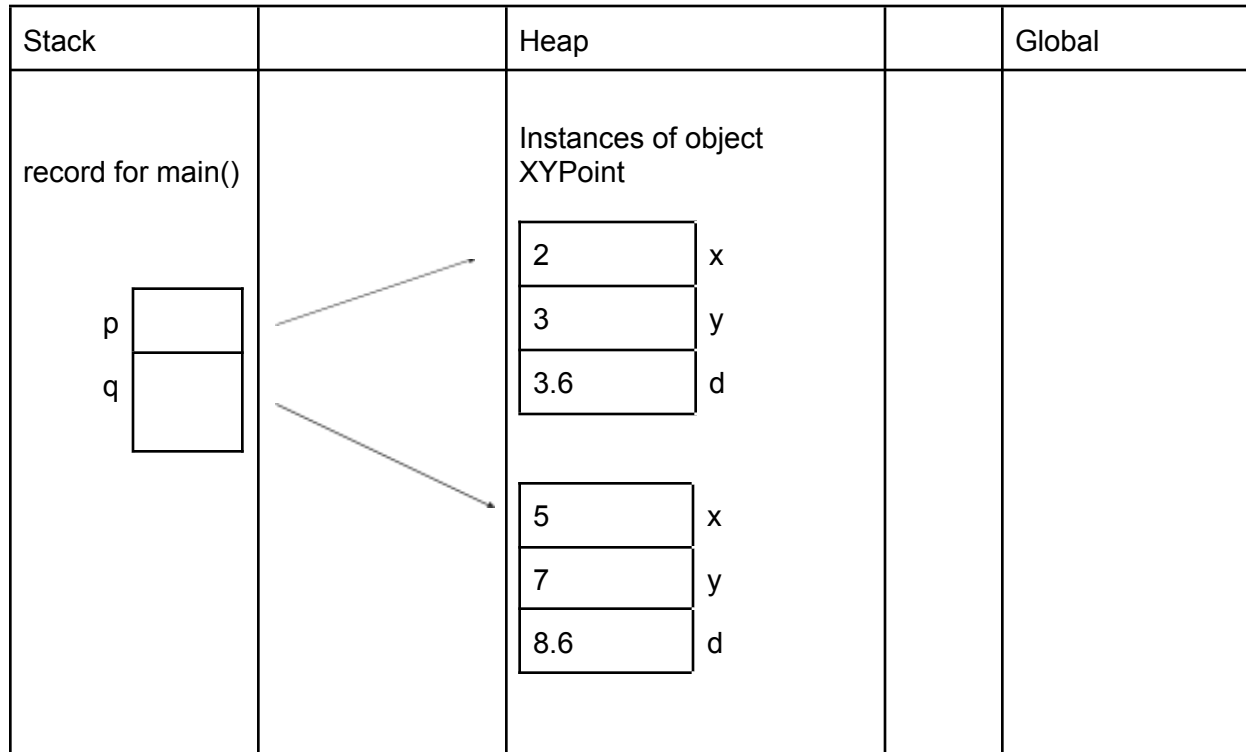
Ex. 0.9

Printed is:

3.605551275463989

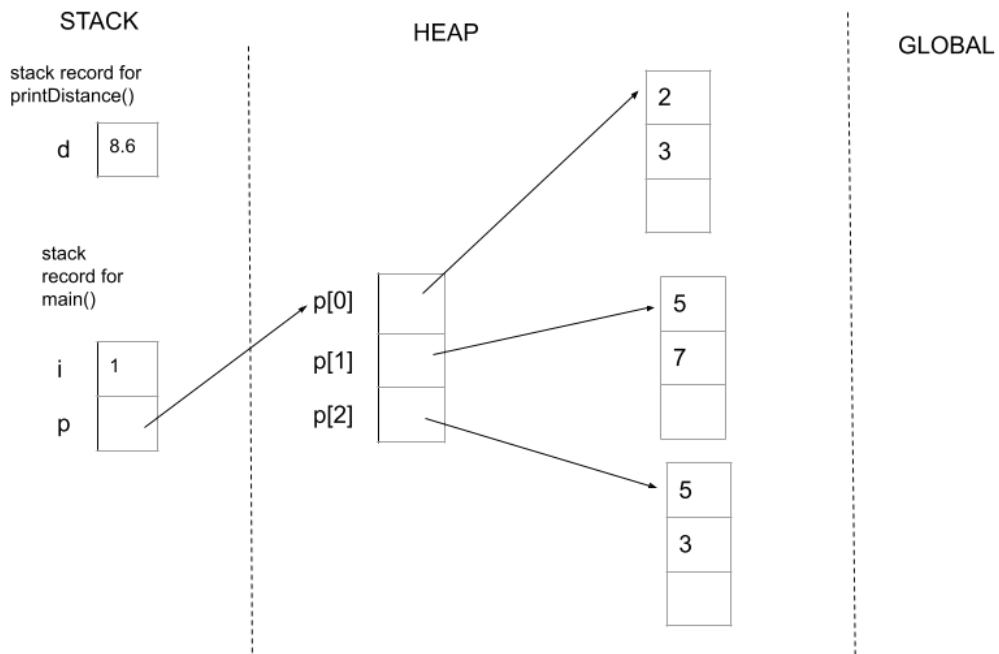
8.602325267042627

Before main() completes

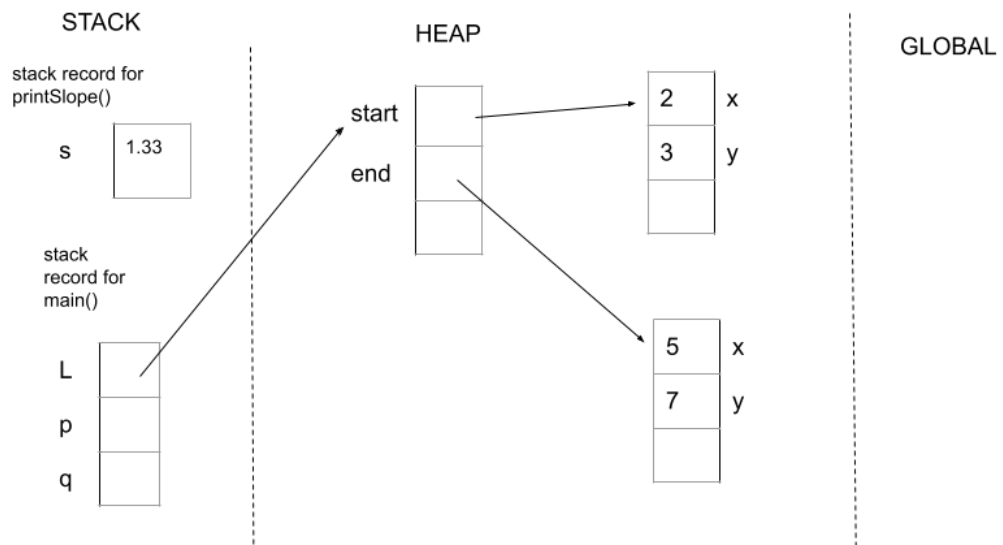


Ex. 0.13

Memory picture just before the println in the printDistance() method when it is called for the second time.

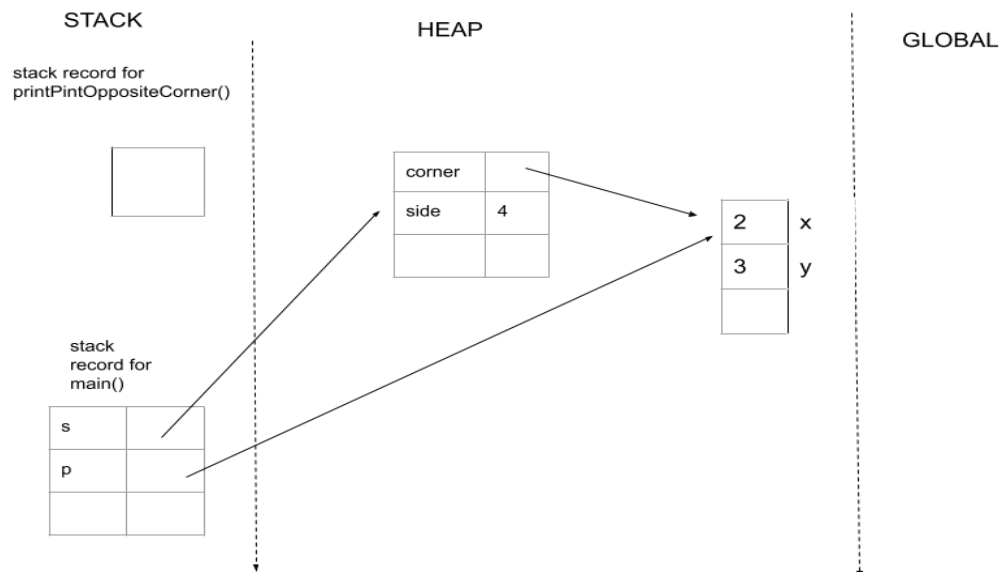


Ex. 0.15



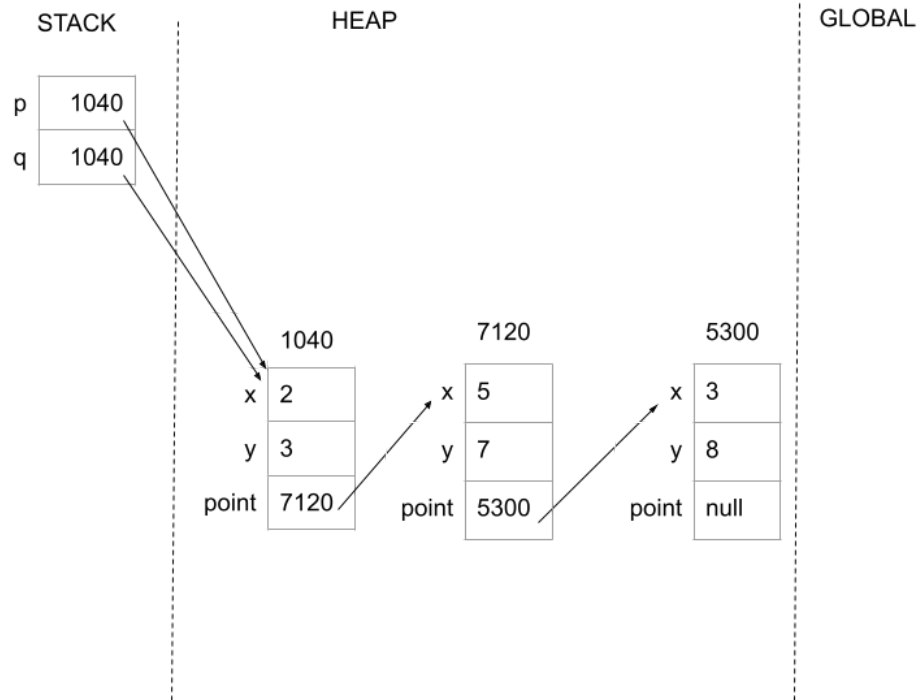
Ex. 0.16

Memory picture just before println in printOppositeCorner()

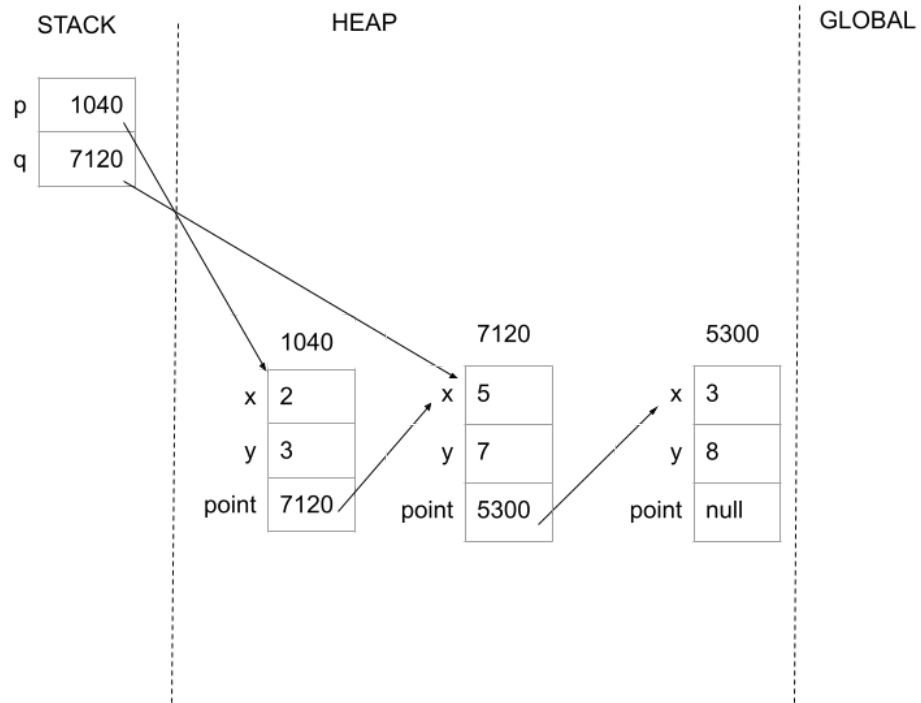


Ex. 0.22

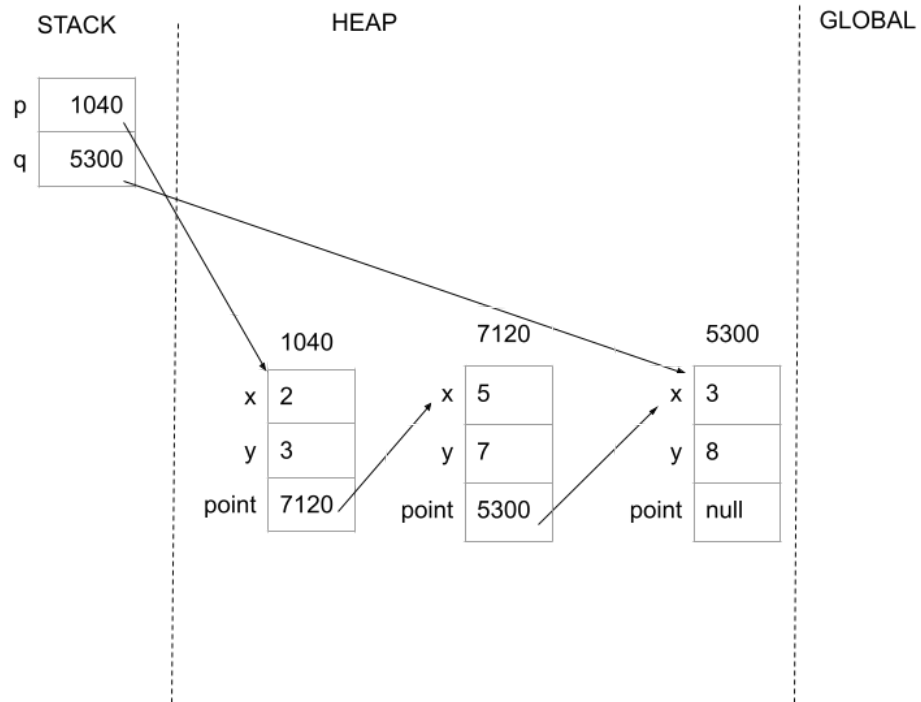
Before first printf



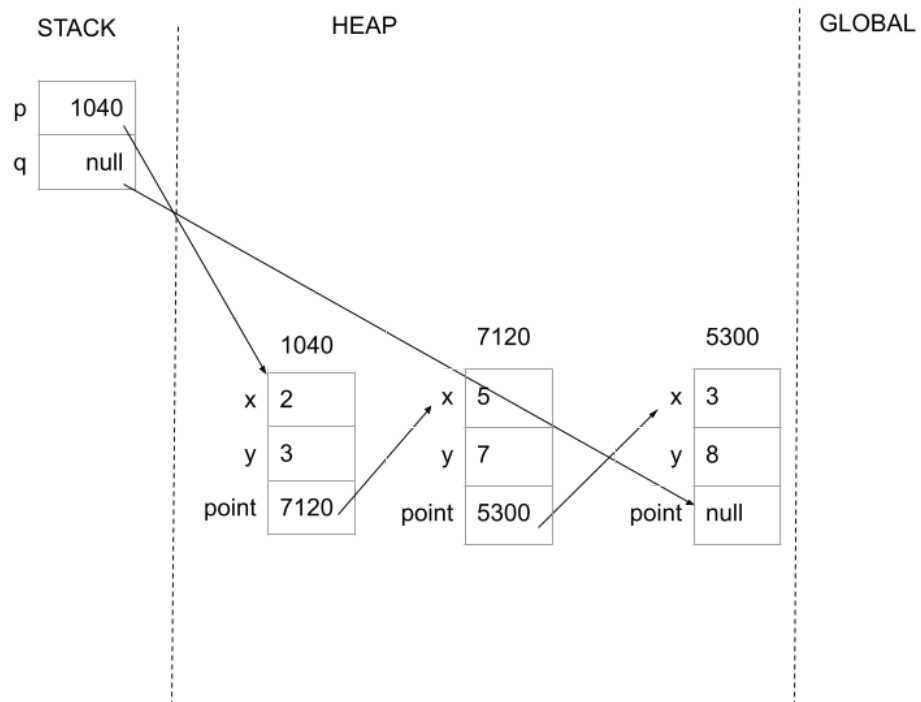
Before second printf



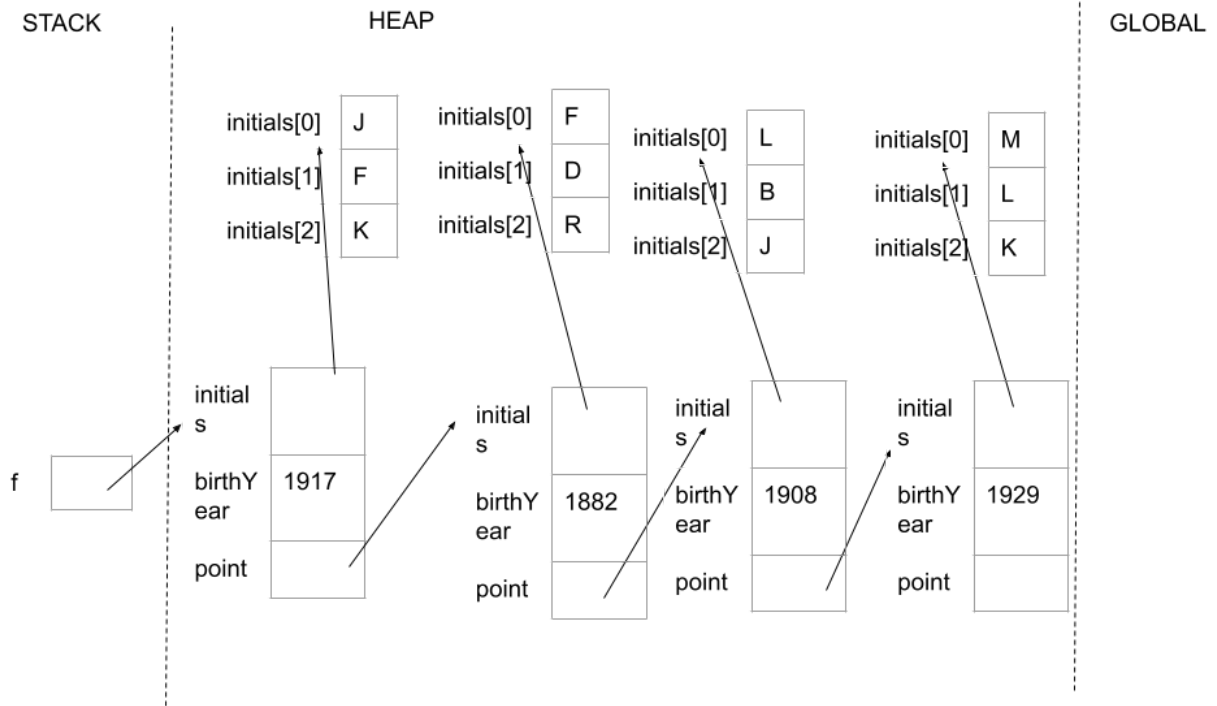
Before third println



Before fourth println

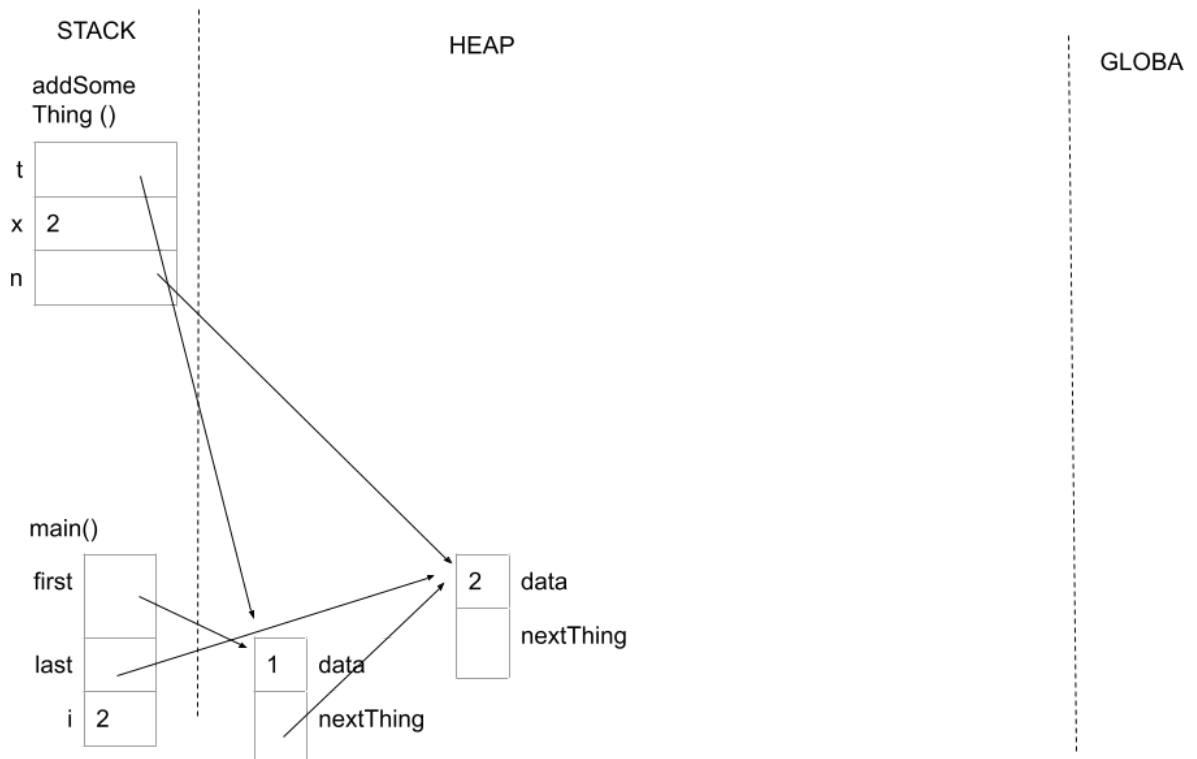


Ex. 0.27

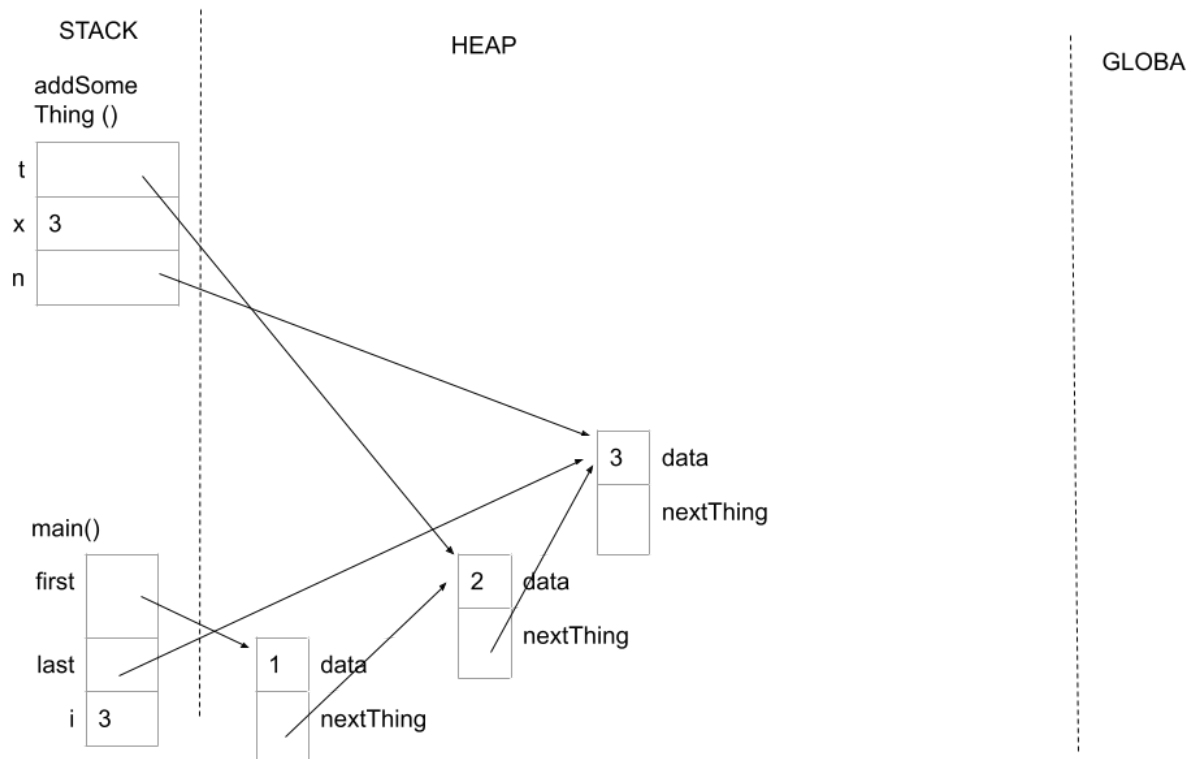


Ex. 0.28

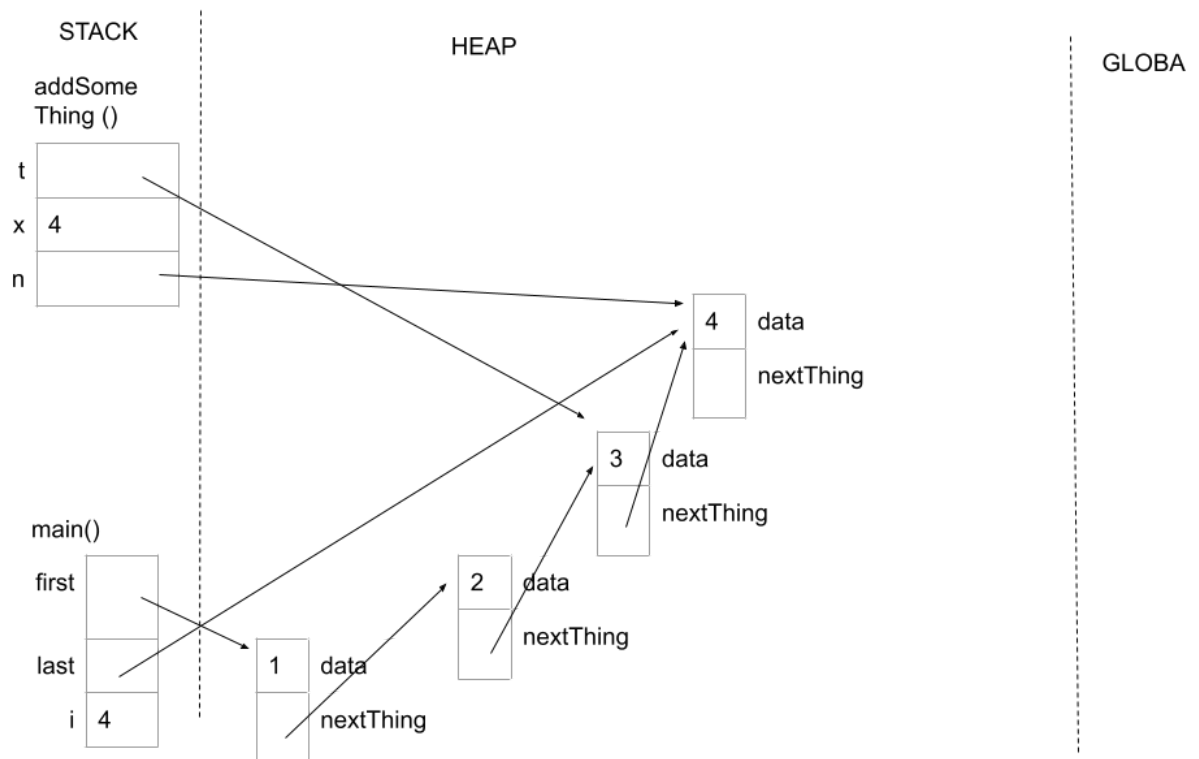
i=2



i=3



i=4



i=5

