

# System memory before test completes

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Higher - Stack  
static memory

fill  
down ↓

free memory

fill up ↑

Lower - Heap

Dynamic memory

Memory Address

Name  
(Not actually in  
computer)

0x01	argv
0x02	a
0x03	b
0x04	c
0x05	d
0x06	
0x07	a.x
0x08	a.y
0x09	
0x10	b.x
0x11	b.y
0x12	
0x13	c.x
0x14	c.y
0x15	
0x16	d.x
0x17	d.y

Memory @ Address

0x??	(pointer to space in heap to store arg array)
0x07	(pointer to 1st variable of Int Point a)
0x10	" b
0x13	" c
0x16	" d

0 } all of these spaces we allocated with  
0 } Int Point 2D x

10 } then assigned values with  
0 } = new IntPoint2D(x, y)

1 } the allocation giving two spaces  
1 } b/c of the two variables  
every Int Point has

The print statements  
do not affect this  
diagram b/c they  
clear up after themselves  
when run. they would  
access these values  
but not affect them