

5. What does the following heap (maximum value at the top) with capacity 15 look like after the value 39 is inserted?

before:

size = 9

75	41	19	31	34	6	10	18	27	44	18	22	42	25	14
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after:

size = _____

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

What does the following heap (maximum value at the top) with capacity 15 look like after the maximum value is deleted?

before:

size = 11

99	86	81	74	65	34	72	19	53	38	61	64	33	22	28
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after:

size = _____

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

6. Fill in the hash table below, showing how to insert the 7 integers 26, 61, 76, 36, 53, 69 and 27, in this order, into an initially empty hash table with maximum capacity 11. Use division modulo 11 as the hash function, and use a linear probe to handle collisions.

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

