

1. `public static int b(int n) { return b(n); }`
This call will keep returning itself, liso n over and over again until it crashes
2. Stack trace: `maxArray`
`int[] arr= {1,5,9,2};`
`int max = maxArray(0, arr);`

Base case: when `n==arr.length-1`, meaning that the recursion has reached to the end of the array

Else:

Stack	Value of <code>arr[n]</code>	Return (push)	Pop (bottom up) And int value returned
<code>maxArray(1, arr)</code>	1	<code>Math.max(arr[0], <i>maxArray</i>(1, arr))</code> → <code>Math.max(1, <i>maxArray</i>(1, arr))</code>	<code>Math.max(1, 9)</code> → 9
<code>maxArray(2, arr)</code>	5	<code>Math.max(arr[1], <i>maxArray</i>(2, arr))</code> → <code>Math.max(5, <i>maxArray</i>(2, arr))</code>	<code>Math.max(5, 9)</code> → 9
<code>maxArray(3, arr)</code>	9	<code>Math.max(arr[2], <i>maxArray</i>(3, arr))</code> → <code>Math.max(9, <i>maxArray</i>(3, arr))</code>	<code>Math.max(9, 2)</code> → 9
<code>maxArray(3, arr)</code>	2	Base case: * <code>n=3=arr.length-1</code> : <code>maxArray(3, arr)</code> : Return <code>arr[n]</code> → <code>return arr[3]</code> → 2	<code>maxArray(3, arr)</code> Return <code>arr[3]</code> → 2

Therefore, the method call returns 9

3. Stack trace: `sumEvenNegative`
`int[] arr= {2,3,6,-4};`
`int a = sumEvenNegative(3, arr);`
N is initialized as size of `arr-1`

Base case: when `n==0`: the recursion has reached the last element

Test: if this last element satisfies the condition even or negative,
then decide whether to add this last element to the sum

Else:

Stack	Value of arr[n]	return(push)di	Pop(bottom up)
<i>sumEvenNegative</i> (2, arr)	-4	Passes if: <i>arr</i> [3]+ <i>sumEvenNegative</i> (2, arr) → -4+ <i>sumEvenNegative</i> (2, arr)	
<i>sumEvenNegative</i> (2, arr)	6	Passes if: <i>arr</i> [2]+ <i>sumEvenNegative</i> (1, arr) → -4+6+ <i>sumEvenNegative</i> (2, arr)	
<i>sumEvenNegative</i> (1, arr)	3	Goes to else: <i>sumEvenNegative</i> (0, arr) → -4+6+ <i>sumEvenNegative</i> (1, arr)	-4+6+2=4
<i>sumEvenNegative</i> (0, arr)	2	Base case: n==0 Passes if in base case: %2==0 <i>sumEvenNegative</i> (0, arr) → Arr[n] → arr[0] → 2	Arr[n] → arr[0] → 2

Therefore, the method call returns 4

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