

FIVE STAR.  
★★★★★

1. (a) outer loop runs from 1 to  $n$   
Inner loop runs from 1 to  $n$ .

$$T(n) = \sum_{i=1}^n \sum_{j=1}^n 1$$

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$$T(n) = \sum_{i=1}^n n$$

$$T(n) = n \sum_{i=1}^n 1$$

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$$T(n) = n \cdot n$$

$$T(n) = n^2$$

Runtime of algorithm is  $O(n^2)$

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