In general, a recurrence of the form T(n) = T(n-1) + f(n) with a constant value for a small input value of T will have the solution T(n) = $\sum_{i=1}^{n} f(i) + c$, for some constant c. (This can be shown by iterating down to a base case.)

Alternatively, one can note that if we "unroll" the recursion, the code effectively runs a nested set of loops where the first loop runs n times, the second loop runs n-1 times, etc., last loop runs once. From that observation, we obtain the same summation as the one shown above.

Grading: 2 pts for recognizing that the initial recursive call does O(n) work.
2 pts for recognizing that the effective input size to the recursive call is n-1, if the input size of the previous input was n.
2 pts for either setting up the recurrence relation or summation
4 pts for solving the recurrence relation or summation

If an answer of O(n^2) is given without any justification, award 1 pt as stated.)