I will now find the total runtime of the outer loop:

$$1 + k \leq n^2$$
$$k \leq n^2 - 1$$

$$1 + \sum_{i=1}^{n^2-1} 1 + 2 = 1 + \sum_{i=1}^{n^2-1} 3 + (2n-1)$$

$$= 1 + \sum_{i=1}^{n^2-1} 2n - 2$$

$$= 1 + (n^2-1)(2n-2)$$

$$= 1 + 2n^3 + 2n^2 - 2n - 2$$

$$= 2n^3 + 2n^2 - 2n - 1$$

From the above we can see that the highest component would be n^3, such that the total runtime of the independent nested loops would be:

$$T(n) = \Theta(n^3)$$