

Assignment#1 Question#2 Andrew Plum

Wednesday, September 20, 2023 1:30 AM

$$\begin{aligned} 2) \sum_{i=0}^{n-1} \sum_{j=i+1}^{n-1} 1 &= \sum_{i=0}^{n-1} (n-1) - (i+1) + 1 = \\ &= \sum_{i=0}^{n-1} [n-1-i-1+1] = \sum_{i=0}^{n-1} [n-i-1] = \\ &= [n-1-0+1][n-1] = n(n-1) \approx \boxed{\Theta(n^2)} \end{aligned}$$