Input: Adjacency Matrix $A$ for $G = (V, E)$, $G$ unweighted, undirected
Output: ??

1. $S = 0$
2. for $i = 1$ to $|V|$
3. for $j = 1$ to $i$
4. $S = S + A(i,j)$
5. Return $S$

Returns $|E|$

How many operations?
- Use $\sum$ for loops
- Use $1$ for $O(1)$ operations

\[
\text{# operations} = D + \sum_{i=1}^{|V|} \left[ \sum_{j=1}^{|V|} K \right] \\
\text{line 1 & 5} \quad \text{line 2} \\
\text{line 3} \quad \text{line 4}
\]

Write your expression from outer loops to inner loop