

1002243108

Jaswanter Reddy Aley.

Date: / /

function  $x = f(n)$

$x = 1;$

for  $i = 1:n$

for  $j = i:n$

$$\sum_{i=1}^n \sum_{j=1}^{n+1} 1$$

$x = x + 1;$

↓

$$\sum_{i=1}^n \sum_{j=1}^{n+1} = 1$$

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

$$T(n) = 2 + 3n + 3n^2$$

The dominant term is  $n^2$ , so runtime is  $O(n^2)$