Q. Develop a table like the one on page 181 for TwoSum.

A. Code

```
public static int countPairs(int[] arr) {
  int count = 0;    // t0
  for (int i = 0; i < arr.length; ++i) {
    // t1
    for(int j = i + 1; j < arr.length; ++j) {
      // t2
      if(arr[i] + arr[j] == 0) {
        // t3
        ++count;
      }
    }
  }
  return count;
}
```

Let array length = n
Number of time of condition is evaluated = x, as it is dependant on the input

Time	Frequency	Total Time
t0	1	t0
t1	n	$n \cdot t1$
t2	$n \cdot (n-1)/2$	$t2 \cdot n \cdot (n-1)/2$
t3	x	$x \cdot t3$

Tilde approximation = $\sim(t_2 . n^2)/2$
Order of growth = n^2