Q2.

The given pseudo code of partition is same as below.

PARTITION(A, p, r)
1    $x = A[r]$
2    $i = p - 1$
3   **for** $j = p$ **to** $r - 1$
4   **if** $A[j] \leq x$
5              $i = i + 1$
6   exchange $A[i]$ with $A[j]$
7   exchange $A[i + 1]$ with $A[r]$
8   **return** $i + 1$

In this code, p means the leftmost index, and r means the rightmost index of the array.

In for loop of this code, there is no nested loop inside, and it always checks the element from p to $r-1$, which count is $n-1$. (if we suppose that the total count of element in the array is n.)

Therefore, we could say that the time complexity of this code is $\Theta(n)$, since it always operates the calculation $n-1$ times.