Practical Analysis

Assume array A is indexed from 1 to n.

```
INEFFICIENT_SORT(A, n)
1.  for i = 1 to n! do
2.      Boolean sortedSoFar = TRUE;
3.      j = 1;
4.      P = nextPermutation(A);
5.      while j < n and sortedSoFar do
6.          if P[j] > P[j + 1]
7.          then sortedSoFar = FALSE
8.          j++
9.  if (sortedSoFar) then output P
```

Analyze the worst-case complexity of INEFFICIENT_SORT assuming that the nextPermutation function always takes $\Theta(n)$ time.

$\Theta(n! \cdot n)$

Your answer should fit above the line!