Count the subarrays having product less than k

Given an array of positive numbers, the task is to find the number of possible contiguous subarrays having product less than a given number k.

Example 1:

Input :
n = 4, k = 10
a[] = {1, 2, 3, 4}
Output :
7
Explanation:
The contiguous subarrays are {1}, {2}, {3}, {4}
{1, 2}, {1, 2, 3} and {2, 3} whose count is 7.

Example 2:

Input:
n = 7 , k = 100
a[] = {1, 9, 2, 8, 6, 4, 3}
Output:
16

Your Task:
You don't need to read input or print anything. Your task is to complete the function **countSubArrayProductLessThanK()** which takes the array **a[]**, its size **n** and an integer **k** as inputs and returns the count of required subarrays.

Expected Time Complexity: O(n)
Expected Auxiliary Space: O(1)

Constraints:
$1<=n<=10^6$
$1<=k<=10^{15}$
$1<=a[i]<=10^5$