

Problem 5: Given an array of integers A and an integer B. Find the total number of subarrays having bitwise XOR of all elements equal to k.

```
def count_subarrays_with_xor(A, k):  
    count = 0  
    prefix_xor_count = {0: 1}  
    prefix_xor = 0  
  
    for num in A:  
        prefix_xor ^= num  
        desired_xor = prefix_xor ^ k  
  
        if desired_xor in prefix_xor_count:  
            count += prefix_xor_count[desired_xor]  
  
        prefix_xor_count[prefix_xor] = prefix_xor_count.get(prefix_xor, 0) + 1  
  
    return count  
  
A = [4, 2, 2, 6, 4]  
k = 6  
print(count_subarrays_with_xor(A, k))  
  
A = [5, 6, 7, 8, 9]  
k = 5  
print(count_subarrays_with_xor(A, k))
```

```
22 print(count_subarrays_with_xor(A, k))
23
```

input

4
2

...Program finished with exit code 0
Press ENTER to exit console.