Sum of Products

Given an array arr[] of size n. Calculate the sum of Bitwise ANDs ie: calculate sum of arr[i] & arr[j] for all the pairs in the given array arr[] where i < j.

Example 1:

```
Input:
n = 3
arr = {5, 10, 15}
Output:
15
Explanation:
The bitwise Ands of all pairs where i<j are (5\&10) = 0,
(5\&15) = 5 and (10\&15) = 10.
Therefore, the total sum = (0+5+10) = 15.
```

Example 2:

```
Input:
n = 4
arr = {10, 20, 30, 40}
Output:
46
Explanation:
The sum of bitwise Ands
of all pairs = (0+10+8+20+0+8) = 46.
```

Your Task:

You don't need to read input or print anything. Your Task is to complete the function pairAndSum() which takes an Integer n and an array arr[] of size n as input parameters and returns the sum of bitwise Ands of all pairs.

Expected Time Complexity:O(n) **Expected Auxillary Space:**O(1)

Constraints: