STUDENT REPORT

DETAILS

Name

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Roll Number

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EXPERIMENT

Title

MAXIMIZE PAIR PRODUCT

Description

Noah is given an integer array A of length N. He must perform the foliowing operations:

Select any integer pair having sum equal to 18 from the array.

Select the pair with maximum product such that the first element of the pair is greater than the second element of the pair.

Your task is to help Noah find and return a pair in the form of an integer array, which satisfies the mentioned conditions.

Input Specification:

input1: An integer value N, representing the size of array A.

Input2: An integer array A.

Output Specification:

Return a pair in the form of an integer array, which satisfies the mentioned conditions.

Sample Input:

8

11 12 2 8 10 11 9 8

Sample Output:

[10, 8]

Source Code:

```python
def find_max_prod_pair(N,A):
    max_prod = float('-inf')
    res_pair = None
    for i in range(N):
        for j in range(N):
            if i!=j:
                if A[i]+A[j] == 18 and A[i] > A[j] :
                    prod = A[i]*A[j]
                    if prod > max_prod :
                        max_prod = prod
                        res_pair = [A[i],A[j]]
    return res_pair
N = int(input())
A = list(map(int,input().split()))
print(find_max_prod_pair(N,A))
```

RESULT

5 / 5 Test Cases Passed | 100 %