Logo

STUDENT REPORT

DETAILS

Name

MADHU.K

Roll Number

3BR23EE057

EXPERIMENT

Title

NUMBER MATCH

Description

Given a match between team A and team B represented by an array, the task is to determine which team wins based on the occurrences of even and odd numbers in an array.

Rules:

- If an even number has an even occurrence, it supports team A; otherwise, it supports team B.
- Similarly, odd numbers support team B if they have even occurrences, otherwise, they support team A.
- If there's a tie, print 'T 0'.

Input Format:
The first line contains an integer n, denoting the number of elements in the array.
The second line contains n integers separated by space, representing the array elements.

Output Format:
If either of the team wins display the team name ('A' or 'B') and how much support the team wins separated by space.
Else if there is a tie display "T 0"

Sample Input:

6

1 2 2 3 4 4

Sample Output:

A 4

Source Code:

```
def determine_winner(n, arr):
    from collections import Counter

    # Count occurrences of each number
    counts = Counter(arr)

    team_a_support = 0
    team_b_support = 0

    # Determine support based on occurrences
    for num, count in counts.items():
        if num % 2 == 0:  # Even number
            if count % 2 == 0:
                team_a_support += count  # Supports team A
            else:
                team_b_support += count  # Supports team B
        else:  # Odd number
            if count % 2 == 0:
                team_b_support += count  # Supports team B
            else:
                team_a_support += count  # Supports team A

    # Determine the result
    if team_a_support > team_b_support:
        return f"A {team_a_support}"
    elif team_b_support > team_a_support:
        return f"B {team_b_support}"
    else:
        return "T 0"

# Sample Input
n = int(input().strip())
arr = list(map(int, input().strip().split()))

# Output the result
print(determine_winner(n, arr))
```

RESULT

1 / 5 Test Cases Passed | 20 %