Question **1**

Correct

Marked out of 10.00

Mamta has received an array of positive numbers. The numbers in the array are in the range from 1 to 250. She has to generate a password using the below mechanism:

The password should consist of THREE parts.

Password = (Part 1)(Part 2)(Part3)

Part 1 = (Number that occurs HIGHEST number of times in the array)

Part 2 = (Number that occurs SECOND HIGHEST number of times in the array)

Part 3 = (Number that occurs LEAST number of times in the array)

Note regarding Part 1 – If more than one number occurs HIGHEST number of times, we must choose the LARGEST of them.

Note regarding Part 2 – If more than one number occurs SECOND HIGHEST number of times, we must choose the LARGEST of them.

Note regarding Part 3 – If more than one number occurs LEAST number of times, we must choose the SMALLEST of them.

Example 1:

If input1 = 10 (representing the number of elements in the array) and the array input2 = {12, 2, 36, 10, 217, 36, 5, 36, 15, 10}.

Then, the password should be formed as follows by combining the 2 parts:

Password = (36)(10)(2) = 36102

Explanation:

In the given array input1,

36 occurs 3 times (So 36 is the Number that occurs HIGHEST number of times in the array).

10 occurs 2 times (So 10 is the Number that occurs SECOND HIGHEST number of times in the array).

There are five numbers (217, 15, 12, 5 and 2) that occur 1 time each and 2 is the lowest of these (so 2 is the number that occurs LEAST number of times in the array).

Therefore, Password = (36)(10)(2) = 36102

Example 2:

input1 = 16 (representing that the array contains 16 numbers)

input2 = {5, 123, 12, 45, 62, 77, 89, 23, 12, 14, 11, 14, 12, 90, 89, 12}

Then, Password will be = (12)(89)(5) = 12895

For example:

Input	Result
10 12 2 36 10 217 36 5 36 15 10	36102
16 5 123 12 45 62 77 89 23 12 14 11 14 12 90 89 12	12895

Answer: (penalty regime: 0 %)

```
from collections import Counter
def passw(arr):
    freq=Counter(arr)
    sorted_freq=sorted(freq.items(),key=lambda x:(-x[1],-x[0]))
    part1= sorted_freq[0][0]
    part2=sorted_freq[1][0]

    min_freq=min(freq.values())
    least_freq=[num for num, count in freq.items() if count== min_freq]
    part3=min(least_freq)

    return f"{part1}{part2}{part3}"

r=int(input())
arr=list(map(int,input().split()))
print(passw(arr))

```

	Input	Expected	Got	
✔	10 12 2 36 10 217 36 5 36 15 10	36102	36102	✔
✔	16 5 123 12 45 62 77 89 23 12 14 11 14 12 90 89 12	12895	12895	✔

Passed all tests! ✔