```c
#include <stdio.h>

int main() {
    int n;
    printf("Enter the size of array: ");
    scanf("%d", &n);
    int a[1000];
    printf("Enter the elements of array: ");
    for (int i = 0; i < n; i++) {
        scanf("%d", &a[i]);
    }
    int count0 = 0, count1 = 0, count2 = 0;
    for (int i = 0; i < n; i++) {
        if (a[i] == 0) count0++;
        else if (a[i] == 1) count1++;
        else if (a[i] == 2) count2++;
    }
    for (int i = 0; i < count0; i++) a[i] = 0;
    for (int i = count0; i < count0 + count1; i++) a[i] = 1;
    for (int i = count0 + count1; i < count0 + count1 + count2; i++) [i] = 2;
    for (int i = 0; i < count0 + count1 + count2; i++) {
        printf("%d ", a[i]);
    }

    return 0;
}
```