**Problem 1:**

#include <iostream>

using namespace std;

int matchingPair(int n, int arr[]){

int ans = 0;

int freq[100] = {0};

for(int i = 0; i < n; i++){

freq[arr[i]]++;

}

for(int i = 0; i < 100; i++){

if(freq[i] > 0)

ans += freq[i] / 2;

}

return ans;

}

int main()

{

int n;

cin >> n;

int arr[n];

for(int i = 0; i < n; i++)

cin >> arr[i];

cout << "Total number of matching pairs are " << matchingPair(n, arr) << endl;

return 0;

}

**Problem 2:**

#include <iostream>

using namespace std;

int maxLenSubArray(int n, int arr[]){

int currLen = 1, finalLength = -1;

for(int i = 1; i < n; i++){

if(arr[i] - arr[i - 1] <= 1){

currLen++;

} else {

finalLength = max(currLen, finalLength);

currLen = 1;

}

}

return max(finalLength, currLen);

}

int main()

{

int n;

cin >> n;

int arr[n];

for(int i = 0; i < n; i++)

cin >> arr[i];

cout << "The length of longest subarray is " << maxLenSubArray(n, arr) << endl;

return 0;

}