Competitive Programming

Program – 1

Aim:

Given a read-only array of integers between 1 and nnn, find one number that repeats. Each element is guaranteed to be in the range from 1 to nnn, and there is exactly one duplicate element.

Input:

1. The first line contains the integer nnn, which is the number of elements in the array.
2. The next nnn lines contain nnn integers, each representing an element of the array.

Code:

```c
#include<stdio.h>

int main(){

  int a;

  scanf("%d",&a);

  int b[a];

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

    scanf("%d",&b[i]);

  }

  int flag=0;

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

    for(int j=i+1;j<a;j++){

      if(b[i]==b[j]){

        printf("%d",b[i]);

        flag=1;

        break;

      }
```

```
        if(flag){

            break;

        }

    }

  }

}
```

Output:

	Input	Expected	Got	
✔	11 10 9 7 6 5 1 2 3 8 4 7	7	7	✔
✔	5 1 2 3 4 4	4	4	✔
✔	5 1 1 2 3 4	1	1	✔