Started on	Monday, 3 November 2025, 11:22 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:24 PM
Time taken	2 mins 31 secs
Marks	1.00/1.00
Grade	**4.00** out of 4.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Find Duplicate in Array.

Given a read only array of n integers between 1 and n, find one number that repeats.

Input Format:

First Line - Number of elements

n Lines - n Elements

Output Format:

Element x - That is repeated

For example:

Input	Result
5 1 1 2 3 4	1

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    int indicator=0;
    for(int i=0;i<n;i++)
      {
          for(int j=i+1;j<n;j++)
          {
             if(arr[i]==arr[j])
               {
                  indicator=arr[i];
                  break;
               }
          }
      }
      printf("%d",indicator);
}
```

	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	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Monday, 3 November 2025, 11:33 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:35 PM
Time taken	1 min 45 secs
Marks	1.00/1.00
Grade	**4.00** out of 4.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Given an array A of sorted integers and another non negative integer k, find if there exists 2 indices i and j such that A[j] - A[i] = k, i != j.

Input Format:

First Line n - Number of elements in an array

Next n Lines - N elements in the array

k - Non - Negative Integer

Output Format:

1 - If pair exists

0 - If no pair exists

Explanation for the given Sample Testcase:

YES as 5 - 1 = 4

So Return 1.

For example:

Input	Result
3 1 3 5 4	1

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
       scanf("%d",&arr[i]);
    }
     int k;
    scanf("%d",&k);
    int flag=0;
    for(int i=0;i<n;i++)
      {
          for(int j=0;j<n;j++)
          {
             if(arr[i]-arr[j]==k && i!=j)
               {
                  flag=1;
                  break;
               }
          }
      }
      printf("%d ",flag);
}
```

	Input	Expected	Got	
✔	3 1 3 5 4	1	1	✔
✔	10 1 4 6 8 12 14 15 20 21 25 1	1	1	✔
✔	10 1 2 3 5 11 14 16 24 28 29 0	0	0	✔
✔	10 0 2 3 7 13 14 15 20 24 25 10	1	1	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course

Started on	Monday, 3 November 2025, 11:25 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:26 PM
Time taken	1 min 1 sec
Marks	1.00/1.00
Grade	**30.00** out of 30.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Find the intersection of two sorted arrays.

OR in other words,

Given 2 sorted arrays, find all the elements which occur in both the arrays.

Input Format

· The first line contains T, the number of test cases. Following T lines contain:

1. Line 1 contains N1, followed by N1 integers of the first array
2. Line 2 contains N2, followed by N2 integers of the second array

Output Format

The intersection of the arrays in a single line

Example

Input:

1

3 10 17 57

6 2 7 10 15 57 246

Output:

10 57

Input:

1

6 1 2 3 4 5 6

2 1 6

Output:

1 6

For example:

Input	Result
1 3 10 17 57 6 2 7 10 15 57 246	10 57

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int test;
    scanf("%d",&test);
    int n1;
    scanf("%d",&n1);
    int arr1[n1];
    for(int i=0;i<n1;i++)
    {
       scanf("%d",&arr1[i]);
    }

    int n2;
    scanf("%d",&n2);
    int arr2[n2];
    for(int i=0;i<n2;i++)
    {
       scanf("%d",&arr2[i]);
```

```
    }

    int indicator;
    for(int i=0;i<n1;i++)
      {
          for(int j=0;j<n2;j++)
          {
             if(arr1[i]==arr2[j])
               {
                  indicator=arr1[i];
                  printf("%d ",indicator);

               }
          }
      }


}
```

	Input	Expected	Got	
✔	1 3 10 17 57 6 2 7 10 15 57 246	10 57	10 57	✔
✔	1 6 1 2 3 4 5 6 2 1 6	1 6	1 6	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course

Started on	Monday, 3 November 2025, 11:18 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:21 PM
Time taken	2 mins 30 secs
Marks	1.00/1.00
Grade	**4.00** out of 4.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Find Duplicate in Array.

Given a read only array of n integers between 1 and n, find one number that repeats.

Input Format:

First Line - Number of elements

n Lines - n Elements

Output Format:

Element x - That is repeated

For example:

Input	Result
5 1 1 2 3 4	1

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    int indicator=0;
    for(int i=0;i<n;i++)
      {
          for(int j=i+1;j<n;j++)
          {
             if(arr[i]==arr[j])
               {
                  indicator=arr[i];
                  break;
               }
          }
      }
      printf("%d",indicator);
}
```

	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	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Started on	Monday, 3 November 2025, 11:27 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:28 PM
Time taken	1 min 19 secs
Marks	1.00/1.00
Grade	**30.00** out of 30.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Find the intersection of two sorted arrays.

OR in other words,

Given 2 sorted arrays, find all the elements which occur in both the arrays.

Input Format

· The first line contains T, the number of test cases. Following T lines contain:

1. Line 1 contains N1, followed by N1 integers of the first array
2. Line 2 contains N2, followed by N2 integers of the second array

Output Format

The intersection of the arrays in a single line

Example

Input:

1

3 10 17 57

6 2 7 10 15 57 246

Output:

10 57

Input:

1

6 1 2 3 4 5 6

2 1 6

Output:

1 6

For example:

Input	Result
1 3 10 17 57 6 2 7 10 15 57 246	10 57

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int test;
    scanf("%d",&test);
    int n1;
    scanf("%d",&n1);
    int arr1[n1];
    for(int i=0;i<n1;i++)
    {
       scanf("%d",&arr1[i]);
    }

    int n2;
    scanf("%d",&n2);
    int arr2[n2];
    for(int i=0;i<n2;i++)
    {
       scanf("%d",&arr2[i]);
```

```
    }

    int indicator;
    for(int i=0;i<n1;i++)
      {
          for(int j=0;j<n2;j++)
          {
             if(arr1[i]==arr2[j])
               {
                  indicator=arr1[i];
                  printf("%d ",indicator);

               }
          }
      }


}
```

	Input	Expected	Got	
✔	1 3 10 17 57 6 2 7 10 15 57 246	10 57	10 57	✔
✔	1 6 1 2 3 4 5 6 2 1 6	1 6	1 6	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course

Started on	Monday, 3 November 2025, 11:31 PM
State	Finished
Completed on	Monday, 3 November 2025, 11:32 PM
Time taken	1 min 33 secs
Marks	1.00/1.00
Grade	**4.00** out of 4.00 (**100**%)

Question 1 | Correct Mark 1.00 out of 1.00

Given an array A of sorted integers and another non negative integer k, find if there exists 2 indices i and j such that A[j] - A[i] = k, i != j.

Input Format:

First Line n - Number of elements in an array

Next n Lines - N elements in the array

k - Non - Negative Integer

Output Format:

1 - If pair exists

0 - If no pair exists

Explanation for the given Sample Testcase:

YES as 5 - 1 = 4

So Return 1.

For example:

Input	Result
3 1 3 5 4	1

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
       scanf("%d",&arr[i]);
    }
     int k;
    scanf("%d",&k);
    int flag=0;
    for(int i=0;i<n;i++)
      {
          for(int j=0;j<n;j++)
          {
             if(arr[i]-arr[j]==k && i!=j)
               {
                  flag=1;
                  break;
               }
          }
      }
      printf("%d ",flag);

}
```

	Input	Expected	Got	
✔	3 1 3 5 4	1	1	✔
✔	10 1 4 6 8 12 14 15 20 21 25 1	1	1	✔
✔	10 1 2 3 5 11 14 16 24 28 29 0	0	0	✔
✔	10 0 2 3 7 13 14 15 20 24 25 10	1	1	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Back to Course