



VISHAL M 2024-CSE ▾

V2**Started on** Wednesday, 8 October 2025, 10:04 AM**State** Finished**Completed on** Wednesday, 8 October 2025, 10:26 AM**Time taken** 22 mins 32 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 %)

```

1  #include<stdio.h>
2
3  int main(){
4      int a;
5      scanf("%d",&a);
6      int m[a];
7
8      for(int i=0;i<a;i++){
9          scanf("%d",&m[i]);
10     }
11
12     for(int i=0;i<a;i++){
13         for(int j=i+1;j<a;j++){
14             if(m[i]==m[j]){
15                 printf("%d",m[i]);
16             }
17         }
18     }
19
20     return 0;
21 }
```

	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.

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V2

Started on	Wednesday, 8 October 2025, 11:12 AM
State	Finished
Completed on	Wednesday, 8 October 2025, 11:14 AM
Time taken	2 mins 25 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 %)

```

1  #include<stdio.h>
2
3  int main(){
4      int a;
5      scanf("%d",&a);
6      int m[a];
7
8      for(int i=0;i<a;i++){
9          scanf("%d",&m[i]);
10     }
11
12     for(int i=0;i<a;i++){
13         for(int j=i+1;j<a;j++){
14             if(m[i]==m[j]){
15                 printf("%d",m[i]);
16             }
17         }
18     }
19
20     return 0;
21 }
```

	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.

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VISHAL M 2024-CSE ▾

V2**Started on** Thursday, 9 October 2025, 3:24 PM**State** Finished**Completed on** Wednesday, 15 October 2025, 10:53 AM**Time taken** 5 days 19 hours**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 %)

```

1 #include <stdio.h>
2
3 int main() {
4     int T;
5     scanf("%d", &T);
6     while (T--) {
7         int n1, n2;
8         scanf("%d", &n1);
9         int a[n1];
10        for (int i = 0; i < n1; i++) scanf("%d", &a[i]);
11        scanf("%d", &n2);
12        int b[n2];
13        for (int i = 0; i < n2; i++) scanf("%d", &b[i]);
14
15        int i = 0, j = 0;
16        while (i < n1 && j < n2) {
17            if (a[i] == b[j]) {
18                printf("%d ", a[i]);
19                i++; j++;
20            } else if (a[i] < b[j]) {
21                i++;
22            } else {
23                j++;
24            }
25        }
26        printf("\n");
27    }
28    return 0;
29 }
```



```
23         }
24         }
25     }
26     printf("\n");
27 }
28 return 0;
29 }
```

	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.



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VISHAL M 2024-CSE ▾

V2**Started on** Wednesday, 15 October 2025, 10:53 AM**State** Finished**Completed on** Wednesday, 15 October 2025, 10:55 AM**Time taken** 2 mins 15 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 %)

```

1 #include <stdio.h>
2
3 int main() {
4     int T;
5     scanf("%d", &T);
6     while (T--) {
7         int n1, n2;
8         scanf("%d", &n1);
9         int a[n1];
10        for (int i = 0; i < n1; i++) scanf("%d", &a[i]);
11        scanf("%d", &n2);
12        int b[n2];
13        for (int i = 0; i < n2; i++) scanf("%d", &b[i]);
14
15        int i = 0, j = 0;
16        while (i < n1 && j < n2) {
17            if (a[i] == b[j]) {
18                printf("%d ", a[i]);
19                i++; j++;
20            } else if (a[i] < b[j]) {
21                i++;
22            } else {
23                j++;
24            }
25        }
26        printf("\n");
27    }
28    return 0;
29 }
```

```
23         }
24         j++;
25     }
26     printf("\n");
27 }
28 return 0;
29 }
```

	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.

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VISHAL M 2024-CSE ▾

V2**Started on** Wednesday, 15 October 2025, 10:54 AM**State** Finished**Completed on** Wednesday, 15 October 2025, 10:56 AM**Time taken** 1 min 52 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 $A[j] - A[i] = k$, $i \neq j$.

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 %)

```

1  #include <stdio.h>
2
3  int main() {
4      int n, k;
5      scanf("%d", &n);
6      int arr[n];
7      for (int i = 0; i < n; i++) scanf("%d", &arr[i]);
8      scanf("%d", &k);
9
10     int i = 0, j = 1, found = 0;
11     while (i < n && j < n) {
12         int diff = arr[j] - arr[i];
13         if (diff == k && i != j) {
14             found = 1;
15             break;
16         } else if (diff < k) {
17             j++;
18         } else {
19             i++;
20             if (i == j) j++;
21         }
22     }
23
24     printf("%d\n", found);
25     return 0;
26 }
```

	Input	Expected	Got	
✓	3 1 3 5 4	1	1	✓

	Input	Expected	Got	
✓	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.

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VISHAL M 2024-CSE ▾

V2**Started on** Wednesday, 15 October 2025, 10:55 AM**State** Finished**Completed on** Wednesday, 15 October 2025, 10:56 AM**Time taken** 1 min 23 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 $A[j] - A[i] = k$, $i \neq j$.

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 %)

```

1  #include <stdio.h>
2
3  int main() {
4      int n, k;
5      scanf("%d", &n);
6      int arr[n];
7      for (int i = 0; i < n; i++) scanf("%d", &arr[i]);
8      scanf("%d", &k);
9
10     int i = 0, j = 1, found = 0;
11     while (i < n && j < n) {
12         int diff = arr[j] - arr[i];
13         if (diff == k && i != j) {
14             found = 1;
15             break;
16         } else if (diff < k) {
17             j++;
18         } else {
19             i++;
20             if (i == j) j++;
21         }
22     }
23
24     printf("%d\n", found);
25     return 0;
26 }
```

	Input	Expected	Got	
✓	3 1 3 5 4	1	1	✓

	Input	Expected	Got	
✓	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.

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