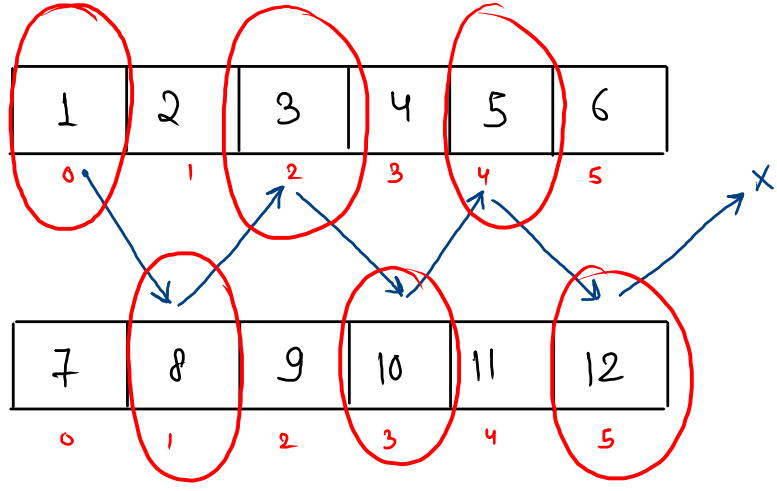
Print two arrays alternately

$n = 6$

arr1 = 1 2 3 4 5 6

arr2 = 7 8 9 10 11 12



O/p :- 1 8 3 10 5 12

observation

index

0 → arr1
1 → arr2
2 → arr1
3 → arr2
4 → arr1
5 → arr2

code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr1 = new int[n];
    for (int i = 0; i < n; i++) {
        arr1[i] = scn.nextInt();
    }

    int[] arr2 = new int[n];
    for (int i = 0; i < n; i++) {
        arr2[i] = scn.nextInt();
    }

    printArrayAlternate(n, arr1, arr2);
}
public static void printArrayAlternate(int n, int[] arr1, int[] arr2) {

    for (int i = 0; i < n; i++) {
        if ( i % 2 == 0 ) {
            System.out.print(arr1[i] + " ");
        } else {
            System.out.print(arr2[i] + " ");
        }
    }

}
```

⟹ Searching in array

Check if x is present in array or not

n = 5

	0	1	2	3	4
arr =	1	2	3	4	5

x = 3

```
for(int i=0; i<n; i++){
    if(arr[i] == x){
        Syso("True");
    }
}
Syso("False");
```

Code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr = new int[n];
    for (int i = 0; i < n; i++) {
        arr[i] = scn.nextInt();
    }

    int target = scn.nextInt();

    findtarget(n, arr, target);
}
public static void findtarget(int n, int[] arr, int target) {
    for (int i = 0; i < n; i++) {
        if ( arr[i] == target ) {
            System.out.println("True");
            return;
        }
    }
    System.out.println("False");
}
```

False

arr = [5 , 4 , 3 , -2 , 0 , 7]
(indices: 0 1 2 3 4 5)

target = -1

i = 0, (5 == -1) X
i = 1, (4 == -1) X
i = 2, (3 == -1) X
i = 3, (-2 == -1) X
i = 4, (0 == -1) X
i = 5, (7 == -1) X
i = 6

Print first index of x in array

$n = 7$

$arr = [\underset{0}{5}, \underset{1}{-2}, \underset{2}{3}, \underset{3}{-2}, \underset{4}{3}, \underset{5}{5}, \underset{6}{3}]$

target = 3

ans = 2

Code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr = new int[n];
    for (int i = 0; i < n; i++) {
        arr[i] = scn.nextInt();
    }
    int target = scn.nextInt();

    System.out.println(firstIndex(arr, target));
}
public static int firstIndex(int[] arr, int target) {
    int n = arr.length;
    for (int i = 0; i < n; i++) {
        if ( arr[i] == target ) {
            return i;
        }
    }
    return -1;
}
```

Print First NON MATCHING NUMBER

n = 6

arr1 =

0	1	2	3	4	5
3	-7	4	9	3	2

arr2 =

0	1	2	3	4	5
3	-7	4	8	3	4

Code

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr1 = new int[n];
    for (int i = 0; i < n; i++) {
        arr1[i] = scn.nextInt();
    }

    int[] arr2 = new int[n];
    for (int i = 0; i < n; i++) {
        arr2[i] = scn.nextInt();
    }

    System.out.println(firstNonMatching(n, arr1, arr2));
}
public static int firstNonMatching(int n, int[] arr1, int[] arr2) {
    for (int i = 0; i < n; i++) {
        if ( arr1[i] != arr2[i] ) {
            return i;
        }
    }
    return -1;
}
```

Note:-

if a function is return type:-

then it must provide some answer back (no matter what)

Note:- if you have no answer then we can return -1 as an answer