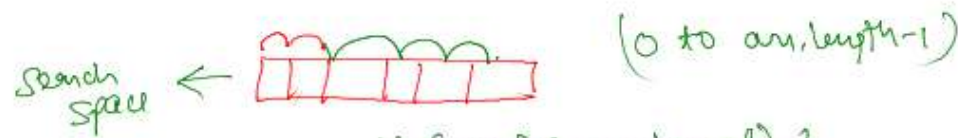


# Arrays : Searching $\rightarrow$ Linear Search



```

if (arr[i] == target) {
    sysfo(true);
} else {
    sysfo(false);
}

```

## Question

10 20 30 40 50 60

tar = 41

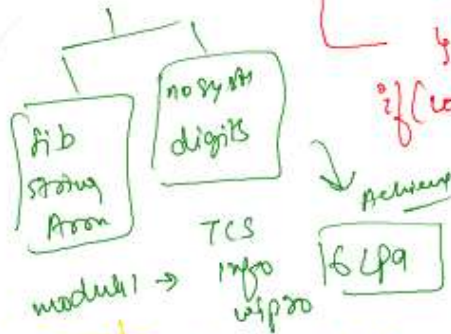
count = 0;

```

for (i = 0; i < arr.length; i++) {
    if (arr[i] == target) {
        sysfo(true);
        count = 1;
    }
}

```

if (count == 0) {  
false  
}



1 week

1st = 20

2nd = 15

3rd = 10

modul1  
 $\rightarrow$  easy ch

Q = 240

1 Ques  $\rightarrow$  3 min

240 x 3 = 720 min

$\frac{720}{48} = 15$

7  $\Rightarrow$  1.5 days

1 week = 3 iteration

45 grants

15 x 2 = 36

Question

n=5

am1

1	1	2	3	5
0	1	2	3	4

am2

1	1	2	3	4
0	1	2	3	4

O/P = 4

+ answer

i i i i i

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr1 = new int[n];
    int[] arr2 = new int[n];
    for(int i = 0; i <= arr1.length - 1; i++){
        arr1[i] = scn.nextInt();
    }
    for(int i = 0; i <= arr2.length - 1; i++){
        arr2[i] = scn.nextInt();
    }

    int ans = FirstNonMatching(arr1, arr2);
    System.out.println(ans);
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class
```

4K

i i i i

am1 =

1	2	3	4	5	6
0	1	2	3	4	5

5K

am2 =

1	2	3	5	6	8
0	1	2	3	4	5

4K 5K

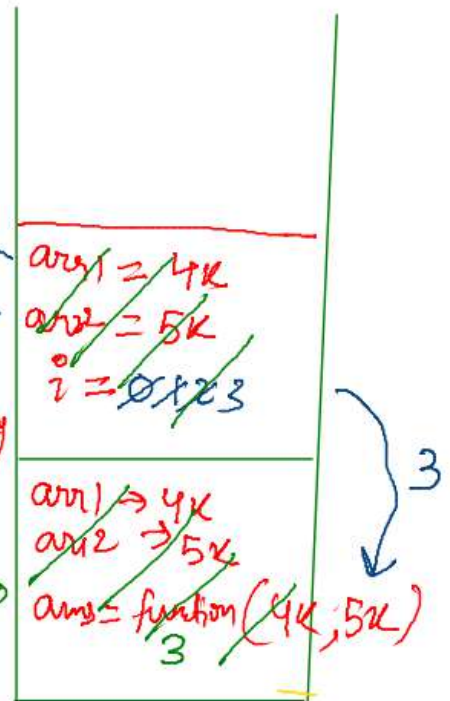
FirstNonMatching

```
public static int FirstNonMatching(int[] arr1, int[] arr2){
    for(int i = 0; i <= arr1.length - 1; i++){
        if(arr1[i] != arr2[i]){
            return i;
        }
    }

    return -1;
}
```

O/P = 3

Answer



Ans

arr- 

i	i	i	i	i	i
1	2	3	4	5	6
0	1	2	3	4	5

 $\Rightarrow$  Ans 21

sum = 0;

for (0 to arr.length)

sum += arr[i];

↓

System.out.println(sum);

```
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<=arr.length-1; i++){  
        arr[i] = scn.nextInt();  
    }  
  
    int sum=0; ✓  
  
    for (int i=0; i<=arr.length-1; i++){  
        sum += arr[i];  
    }  
    System.out.println(sum); ✓  
    /* Enter your code here. Read input from STDIN. Print output to  
}
```

arr = 

i	i	i	i	i	i	i
1	2	3	4	5	6	
0	1	2	3	4	5	

sum = 0 + 3 + 6 + 10 + 15

i = 0 + 2 + 3 + 4 + 5 + 6 = 21

→ 21  
Ans

Question

Count Even

arr = 

1	2	3	4	5	6	7
---	---	---	---	---	---	---

  
0 1 2 3 4 5 6

count = # of even nos. →

```
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<=arr.length-1; i++){  
        arr[i]= scn.nextInt();  
    }  
    int count=0;  
    //travel through array and count # of even no  
    for(int i=0; i<=arr.length-1; i++){  
        if(arr[i]%2==0){  
            count++;  
        }  
    }  
    System.out.println(count); ✓
```

arr = 

12	1	2	3	4	5	6
----	---	---	---	---	---	---

  
0 1 2 3 4 5 6

Handwritten annotations above the array:   
- Above index 0: ~~x~~  
- Above index 1: ~~x~~  
- Above index 2: ~~x~~  
- Above index 3: ~~x~~  
- Above index 4: ~~x~~  
- Above index 5: ~~x~~  
- Above index 6: ~~x~~  
- Above index 7: i

Count = ~~0~~ ~~1~~ ~~2~~ ~~3~~ 4  
i = ~~0~~

4 ✓  
Panna

/\* Enter your code here. Read input from STDIN. Print output to STDOUT



Ques Max no in an array

arr =

10	20	50	31	29	87	23
0	1	2	3	4	5	6

max =  $[-\infty, arr[0]]$

for ( i to arr.length-1 ) {

if ( max < arr[i] )  
max = arr[i];

}

syso(max);

max = 87

Integer.MIN\_VALUE

max = 50