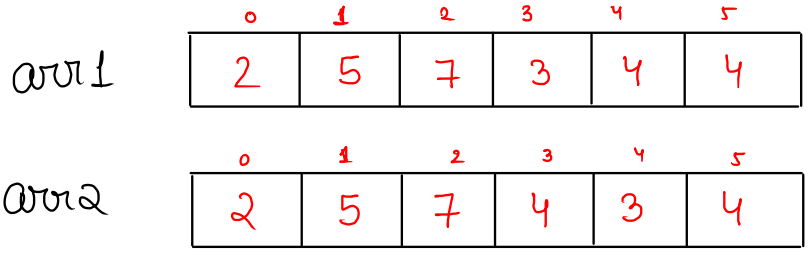
Print First NON MATCHING NUMBER

n = 6



ans → 3

```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();
    }

    int ans = checkFirstNonMatchingNumber(arr1, arr2, n);
    System.out.println(ans);
}
public static int checkFirstNonMatchingNumber(int[] arr1, int[] arr2, int n) {
    for (int i = 0; i < n; i++) {
        if ( arr1[i] != arr2[i] ) {
            return i;
        }
    }
    return 2345;
}
```

Sum of all Elements of Array

$n = 6$

arr

0	1	2	3	4	5
2	5	-2	-10	15	6

int sum = 0 + 2 + 5 + (-2) + (-10) + 15 + 6

```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();
    }

    System.out.println(findSum(arr));
}
public static int findSum(int[] arr) {
    int sum = 0;
    for (int i = 0; i < arr.length; i++) {
        sum = sum + arr[i];
    }
    return sum;
}
```

Maximum of Array

n = 7

arr

0	1	2	3	4	5	6
5	3	1	7	9	8	10

curr

if (max < curr)

max = curr

int max = ~~-∞~~ ~~5~~ ~~7~~ ~~9~~ 10

```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();
    }

    System.out.println(findMax(arr));
}
public static int findMax(int[] arr) {
    int max = Integer.MIN_VALUE;
    for (int i = 0; i < arr.length; i++) {
        if ( max < arr[i] ) {
            max = arr[i];
        }
    }
    return max;
}
```

max = ~~-∞~~ ~~5~~ ~~7~~ ~~9~~ 10

i=0, (-∞ < 5) ✓

i=1, (5 < 3) ✗

i=2, (5 < 1) ✗

i=3, (5 < 7) ✓

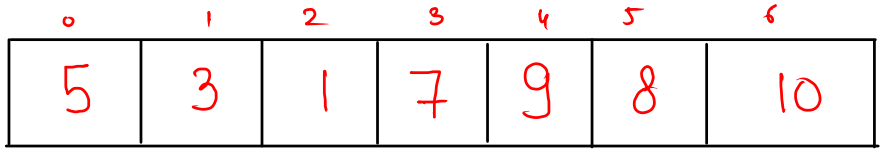
i=4, (7 < 9) ✓

i=5, (9 < 8) ✗

i=6, (9 < 10) ✓

GKSTR35 Count_Even

n = 7 arr



ans = 2

```
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();
    }

    System.out.println(countEven(arr));
}
public static int countEven(int[] arr) {
    int count = 0;

    for (int i = 0; i < arr.length; i++) {
        if ( arr[i] % 2 == 0 ) {
            count++;
        }
    }

    return count;
}
```

```
if ( arr[i] % 2 == 0 ){
    Count++;
}
```

Count = 0

i=0, C=0

i=1, C=0

i=2, C=0

i=3, C=0

i=4, C=0

i=5, C=1

i=6, C=2

Product of Elements Except Itself

$n = 6$

arr =

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

ans =

0	1	2	3	4	5
30	20	60	30	12	60

$3 \times 1 \times 2 \times 5 \times 1$

$2 \times 1 \times 2 \times 5 \times 1$

nested loops

when you travel entire array for each element

```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();
    }

    prodExceptItself(arr, n);
}
public static void prodExceptItself(int[] arr, int n){
    for (int i = 0; i < n; i++) {
        int prod = 1;
        for (int j = 0; j < n; j++) {
            if ( i != j ) {
                prod = prod * arr[j];
            }
        }
    }
}
```