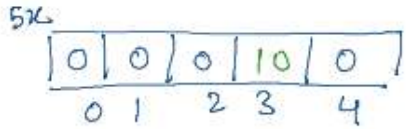
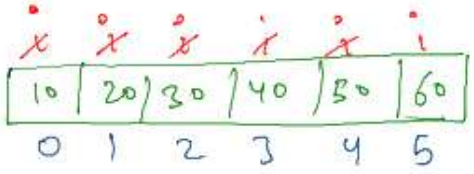
Arrays :- A continious memory allocation with similar datatype

```
int[] arr = new int[5];
```




```
arr[3] = 10;
Syso(arr[3]
```

arr=



6 ✗ array out of bound

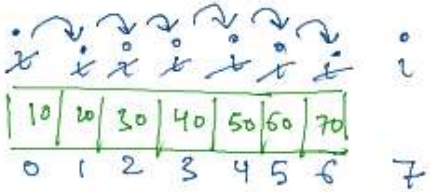
arr[6] ⇒ error

length = 6

```
for(i=0; i<=arr.length-1; i++){
    Syso(arr[i]);
}
```

i<=6

arr =



6<=6

7<=6 ✗

```
arr[0] = 10
arr[1] = 20
arr[2] = 30
arr[3] = 40
arr[4] = 50
arr[5] = 60
```

```
for(int i=0; i<=arr.length; i++){
    Syso(arr[i]);
}
```

i<=5

i<arr.length

char arr:

'a'	'b'	'c'	'd'	'e'	'f'
0	1	2	3	4	5

? 6 error index out of bound

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

6<=6 ✗

'a'
'b'
'c'
'd'
'e'
'f'

arr[6]

✓ int[] arr = new int[n]; → |10|20|30|40|50|

char[] arr = new char[n]; → |'a'|'b'|'c'|'d'|'e'|

boolean[] arr = new boolean[n]; → |T|F|T|T|F|

String[] arr = new String[n];

↓

|"Kasie"|"is"|"my"|"fav"|

```
public static void main(String[] args) {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class sh
    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();
    }

    for(int i=0;i<= arr.length-1;i++){
        System.out.println(arr[i]);
    }

}
```

n = 5 (arr ki length)

n = 5

1 2 3 4 5

0 1 2 3 4 5

arr[i] = arr ka ith index ki value use karna chahte hai.

```
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();
    }

    for(int i=0;i<=arr.length-1;i+=2){

        System.out.println(arr[i]);

    }
    /* Enter your code here. Read input from STDIN. Print output to STDO
}
```

n = 6

27 28 19 57 10 11

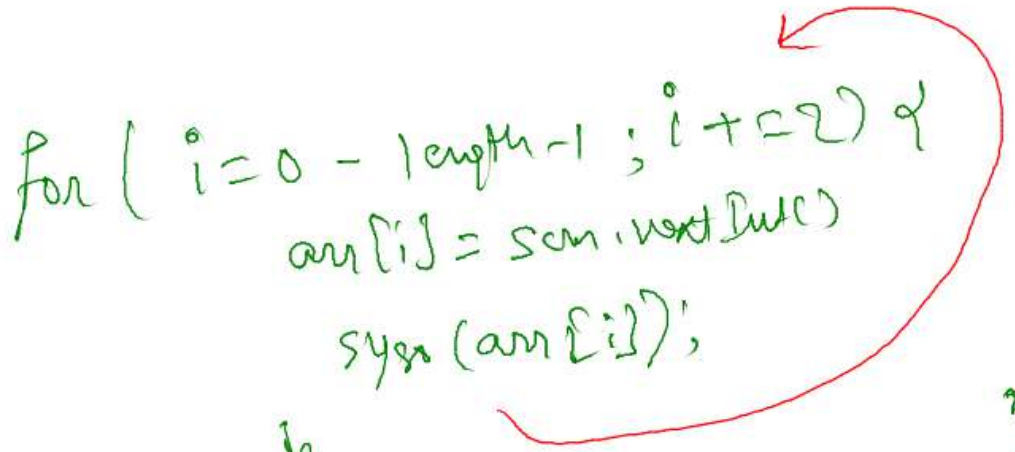
0 1 2 3 4 5 6

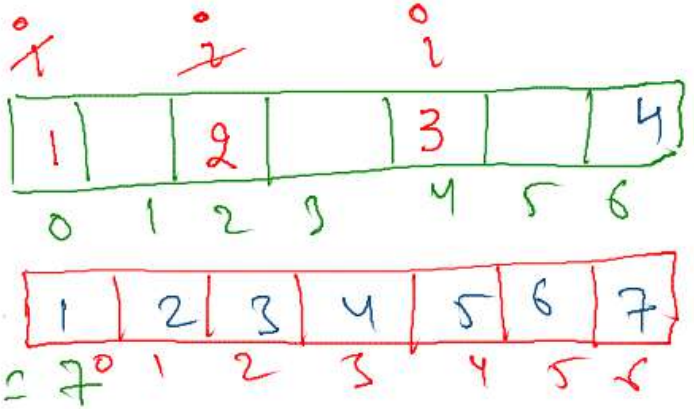
o/p

27

19

10





o/p = 1
2
3

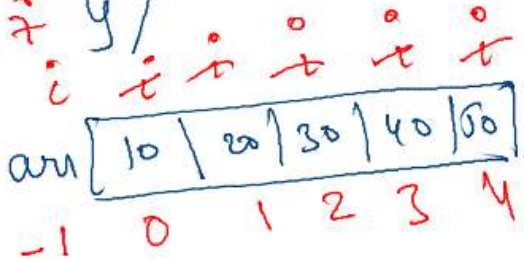
1 ✓
2 ✓
3
4
5
6
7 }

First Reverse

Q

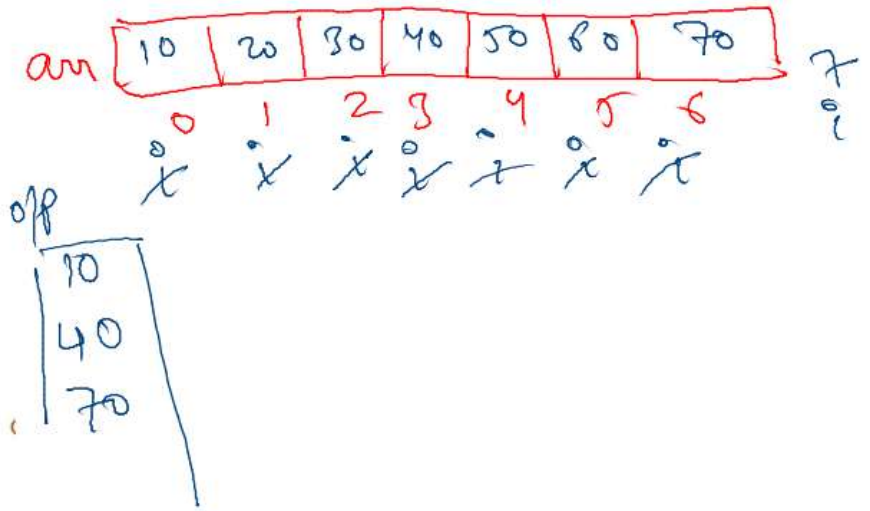
```
public class Solution {

    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();
        }

        for(int i= arr.length-1;i>=0;i--){
            System.out.print(arr[i]+" ");
        }
        /* Enter your code here. Read input from STDIN. Print output
```

o/p
50 ✓
40 ✓
30 ✓
20 ✓
10 ✓



(-1>=0) false

```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<=arr.length-1;i++){
        arr[i]=scn.nextInt();
    }

    for(int i=0;i<=arr.length-1;i++){
        if(i%3==0){
            System.out.print(arr[i]+" ");
        }
    }
    /* Enter your code here. Read input from STDIN. Print
}
```



Q4

Given 2 Arrays

arr1 = | 1 | 2 | 3 | 4 | 5 |
0 1 2 3 4

arr2 = | 1 | 2 | 3 | 4 | 5 |
0 1 2 3 4

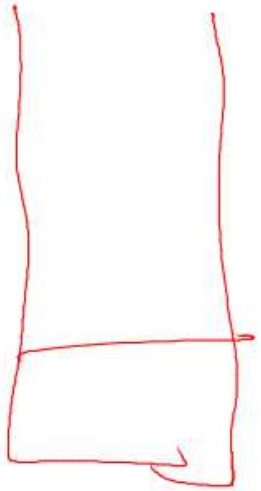
Identical → true
Not identical → false

```
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-1;i++){
        arr1[i]= scn.nextInt();
    }
    int m = scn.nextInt();
    int[] arr2 = new int[m];

    for(int i =0;i<=m-1;i++){
        arr2[i]= scn.nextInt();
    }

    if(arr1.length!= arr2.length){
        System.out.println("false");
        return;
    }else{
        for(int i=0;i<=arr1.length-1 ;i++){
            if(arr1[i]!=arr2[i]){
                System.out.println("false");
                return;
            }
        }
    }

    System.out.println("true");
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class shou
```

arr1 = | 1 | 2 | 3 | 4 | 4
arr2 = | 1 | 2 | 3 | 4 | 4
0 1 2 3

true

i = 0 1 2 3 4



Test 1

arr1 = 4 ✓ | 1 | 2 | 3 | 4 | ✓

arr = 4 ✓ | 1 | 2 | 3 | 4 | ✓

i i i i i

true ; identical

Test 2

arr1 = 4 ✓ | 1 | 3 | 4 | 5 |

arr2 = 4 ✓ | 1 | 2 | 3 | 4 |

i

false

non identical

(3 ; 2)

4

4K 5K

```
if (arr1 == arr2) {
    Sys ("true")
}
else {
    sys ("false");
}
```