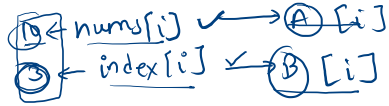
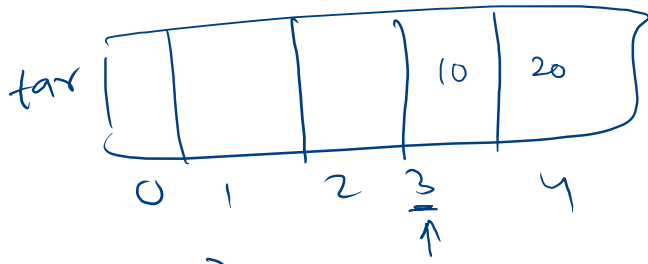
Solve Array

Take **n** as an integer input representing size of both array.

Take **n** integer inputs for numbers array and Then take n integer inputs for array indexes where each integer input can be from **0 till numbers.length**.

Then create an array of size n and name it target array. From left to right read **numbers[i]** and **index[i]** and in the target array at the index **index[i]**, insert the value **numbers[i]**.





eg. i/p (5)

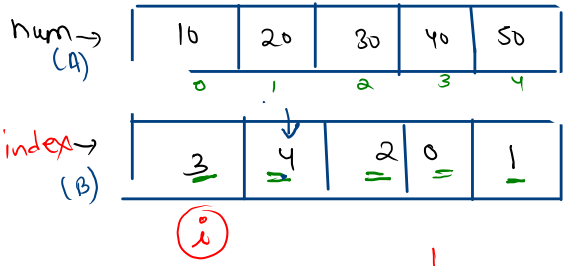
idx B[i]	0	1	2	3	4
val	10	20	30	40	50
	3	4	2	0	1

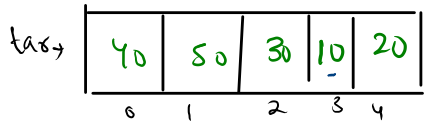
$< n$

⇒ o/p

0	1	2	3	4
40	50	30	10	20

$tar[B[i]] = A[i]$





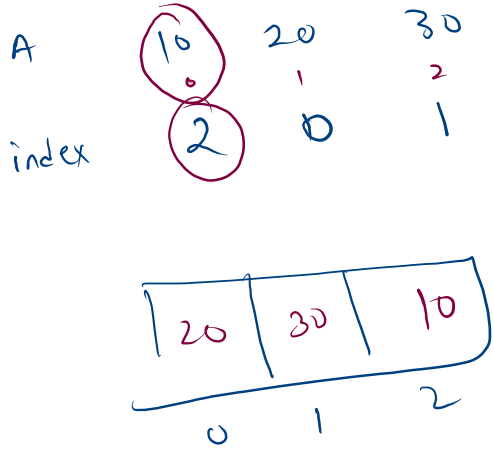
each.

val = num[i]

idx = index[i]

tar[idx] = val.

```java
import java.io.*;
import java.util.*;

public class Solution {

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

        //logic
        int [] tar = new int[n];

        for(int i = 0; i < n; i++){
            int val = A[i];
            int idx = index[i];
            tar[idx] = val;
        }

        for(int i = 0; i < n; i++){
            System.out.print(tar[i] + " ");
        }
    }
}
```



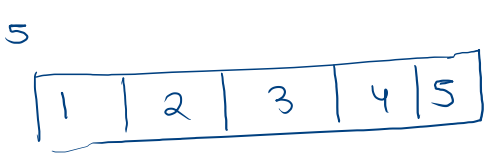
Add One.

Take an **array arr** of size **N** as input which represents a **large number**.

Add 1 (one) to this large number and print the resultant array.

eg:- [4,2,3,6,5,8,7,1,5,3,9,6] In this case answer must be [4,2,3,6,5,8,7,1,5,3,9,7]

Note: The large integer does not contain any **leading 0's** in the array.



#1

12345
+ 1
12346

#2

1 2 3 4 5
+ 1

#3

99

#

1 9
+ 1

10

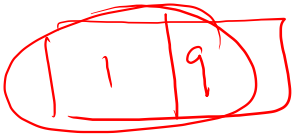
2 0

Case 2

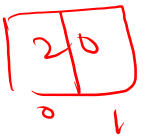
19

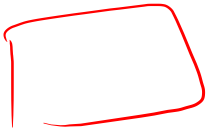
2

1 9



ans





int [ ] ans = new

19

+1

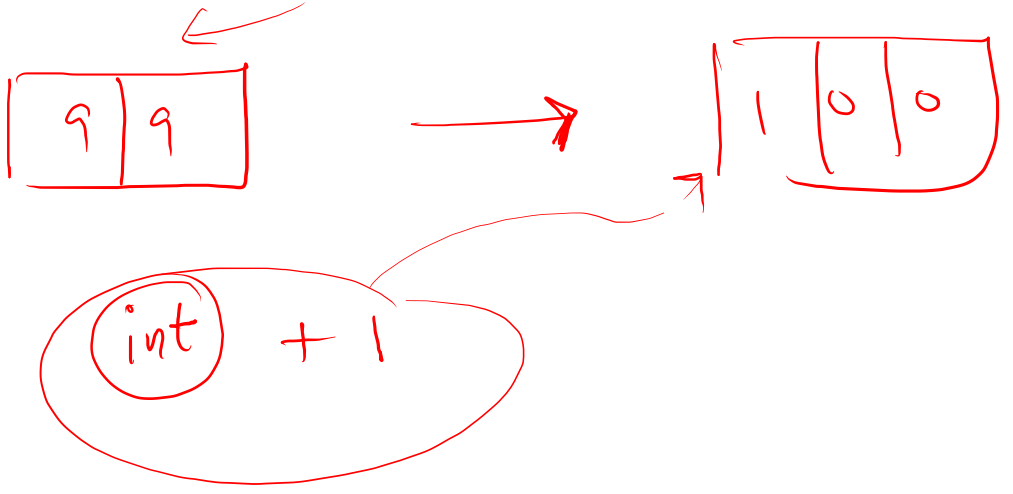
20

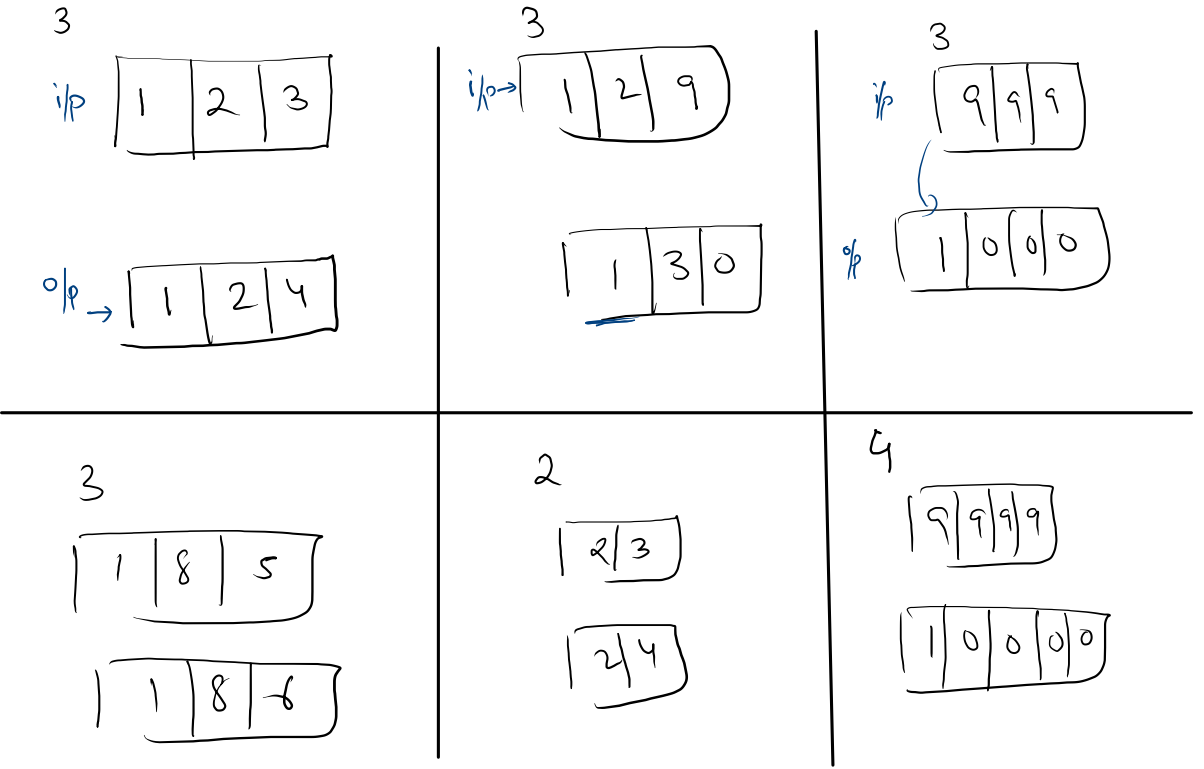
19

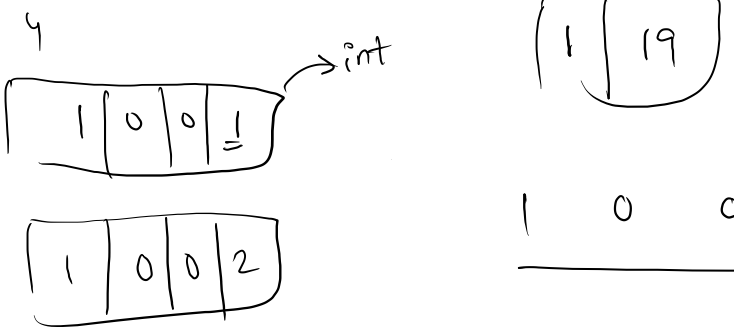
+1

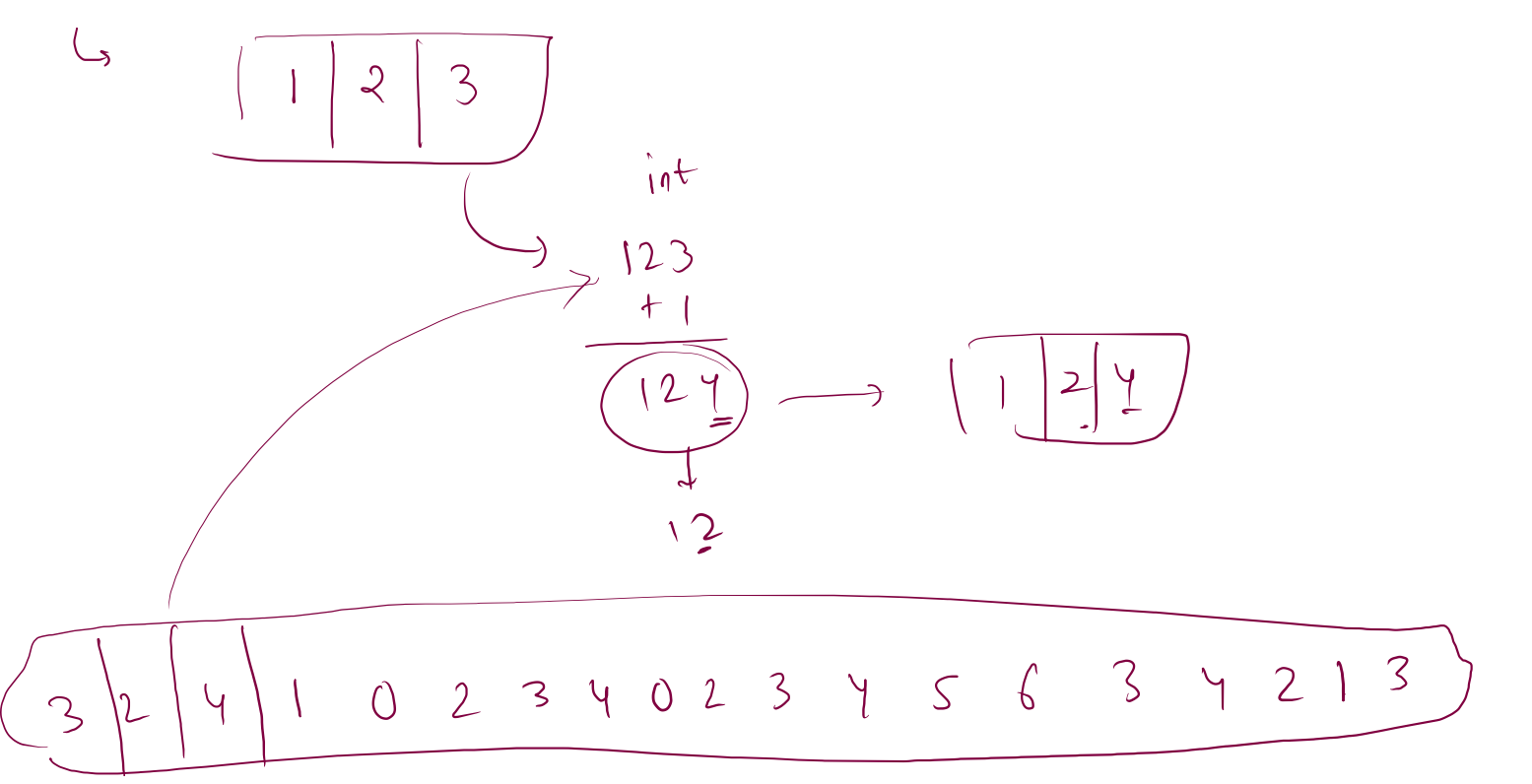
case 3 -

$n = 2$




3
i/p
1 2 3
o/p
1 2 4
3
i/p
1 2 9
1 3 0
3
i/p
9 9 9
o/p
1 0 0 0
3
1 8 5
1 8 6
2
2 3
2 4
4
9 9 9 9
1 0 0 0 0


4
int
1 0 0 1
1 0 0 2
1 19
1 0 0 2


1 2 3
int
123
+1
124
1 2 4
12
3 2 4 1 0 2 3 4 0 2 3 4 5 6 3 4 2 1 3

right to left

carry = 1

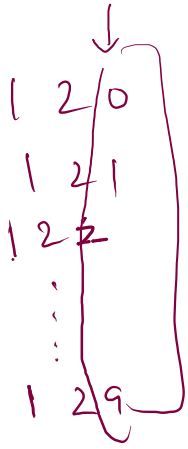
```
  0
1 2 3
    +1
-------
1 2 4
```

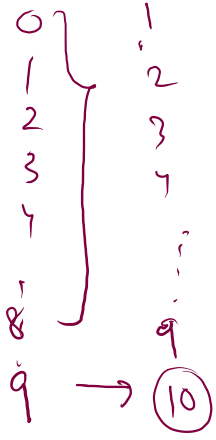
1	2	3

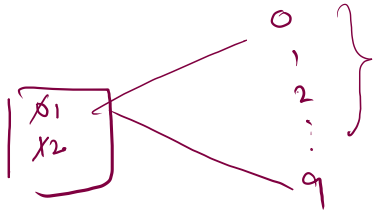
1

0

4







10

x
0
8

carry = 0

val = x+1

9 } 10

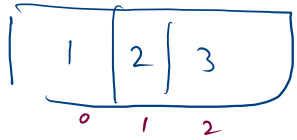
carry = 1

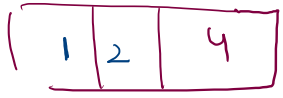
val = 0

0 1
1 8 1 8
+ 1

Carry = ~~1~~ ~~0~~ ~~0~~ 0

n = 3

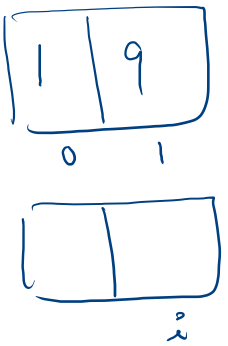




i

```
13          int [] ans = new int[n];
14
15          //solve
16
17          int carry = 1;
18          for(int i = n-1; i >= 0; i--){
19              int val = A[i] + carry;
20              if(val == 10){
21
22              }else{      //val is not 10 i.e, val < 10
23                  ans[i] = val;
24                  carry = 0;
25              }
26          }
27      }
28
```

val = 1 + 0 = 1




```
13          int [] ans = new int[n];
14
15          //solve
16
17          int carry = 1;
18          for(int i = n-1; i >= 0; i--){
19              int val = A[i] + carry;
20              if(val == 10){
21
22              }else{      //val is not 10 i.e, val < 10
23                  ans[i] = val;
24                  carry = 0;
25              }
26          }
27      }
28
```

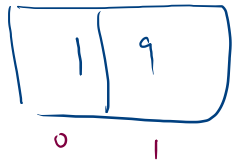
2

1 9

```
int carry = 1;
for(int i = n-1; i >= 0; i--){
    int val = A[i] + carry;
    if(val == 10){
        ans[i] = 0;
        carry = 1;
    }else{      //val is not 10 i.e, val < 10
        ans[i] = val;
        carry = 0;
    }
}
```

n=2

Carry = 1 ✗ 0



i

v = 9 + 1 = 10

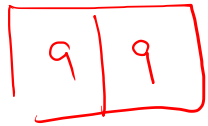
v = 1 + 1 = 2

2

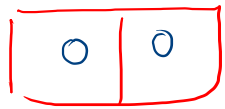
9 9

n = 2

Carry = ~~X~~ ~~X~~ 1




```
int carry = 1;
for(int i = n-1; i >= 0; i--){
    int val = A[i] + carry;
    if(val == 10){
        ans[i] = 0;
        carry = 1;
    }else{      //val is not 10 i.e, val < 10
        ans[i] = val;
        carry = 0;
    }
}
```



i

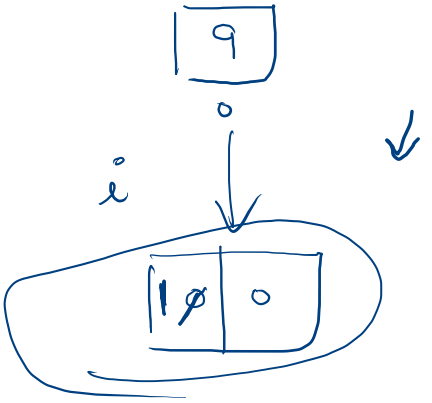
v = 9 + 1 = 10

= 9 + 1 = 10

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();
        int [] A = new int[n];
        for(int i = 0; i < n; i++){
            A[i] = scn.nextInt();
        }
        int [] ans = new int[n];
        //solve
        int carry = 1;
        for(int i = n-1; i >= 0; i--){
            int val = A[i] + carry;
            if(val == 10){
                ans[i] = 0;
                carry = 1;
            }else{      //val is not 10 i.e, val < 10
                ans[i] = val;
                carry = 0;
            }
        }
        if(carry == 1){ //resize
            ans = new int[n+1];
            ans[0] = 1;

        }
        //print
        for(int i = 0; i < ans.length; i++){
            System.out.print(ans[i] + " ");
        }
    }

```

n = 1

carry = 1



```java
class Solution {
    public int[] plusOne(int[] A) {
        int n = A.length;
        int [] ans = new int[n];
        //solve
        int carry = 1;
        for(int i = n-1; i >= 0; i--){
            int val = A[i] + carry;
            if(val == 10){
                ans[i] = 0;
                carry = 1;
            }else{      //val is not 10 i.e, val < 10
                ans[i] = val;
                carry = 0;
            }
        }
        if(carry == 1){ //resize
            ans = new int[n+1];
            ans[0] = 1;

        }
        return ans;
    }
}
```

Print Pair

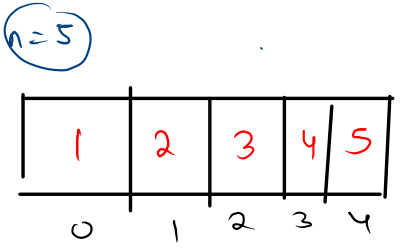
Take the array of size **n** and their values from user. And Print all the **pairs** in the array.

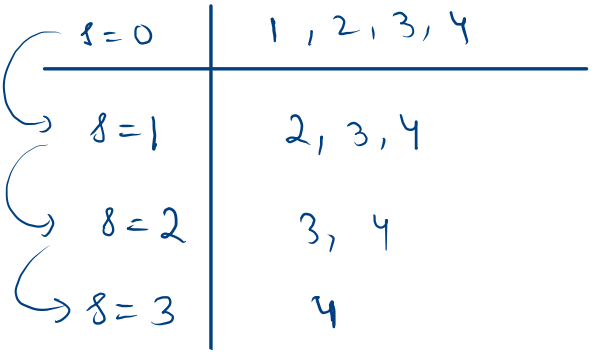
Sample Input 0

```
5
1 2 3 4 5
```

Sample Output 0

```
1 2
1 3
1 4
1 5
2 3
2 4
2 5
3 4
3 5
4 5
```





Logic.

s e

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

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

2 3 4 3
2 3 5 4

3 4 5 4

n = 5

0 < n-1

0 1 2 3 < 4

i = 0	1, 2, 3, 4
i = 1	2, 3, 4
i = 2	3, 4
i = 3	4

i = 0

e [i+1 , < n]

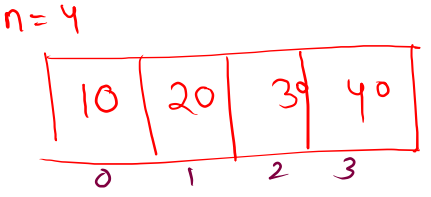
[1, 2 3 4]

i = 1

e [i+1 , < n]

[2 3 4]

```java
import java.io.*;
import java.util.*;

public class Solution {

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

        //logic
        for(int s = 0; s < n-1; s++){
            for(int e = s + 1; e < n; e++){
                System.out.println(A[s] + " " + A[e]);
            }
        }

    }
}
```



s < n-1

0 < 3 ✓

s = 0

for e = 1 1 < 4 ✓

2 2 < 4

=

A[0] A[1]

10 20

10 30