https://course.acciojob.com/idle?question=5b636ef5-b117-4bb4-a0af-8ca3564aabc6

- EASY
- Max Score: 30 Points

Element arrangement

You are given an array `arr` of size `N`.You need to print the array in a specific format i.e, all the odd indexed elements followed by all the even indexed elements in decreasing order. Look at examples for more clarity.

Note

Consider 1-based indexing.

Input Format

The first line of input contains a single integer representing `N`.

The second line of input contains `N` space-separated integer representing the array elements.

Output Format

Print the array in the specified format.

Example 1

Input

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

Output:

```
1 3 2 4 5
```

Explanation:

Odd indexed elements are 1, 3, and 2. Even indexed elements are 5 and 4. We will print odd indexed elements as it is given but we will print even indexed elements in reverse order. So the array will look like {1, 3, 2, 4, 5}.

Example 2

Input

```
3
4 3 1
```

Output:

```
4 1 3
```

Explanation:

Odd indexed elements are 4 and 1. Even indexed element is 3. We will print odd indexed elements as it is given but we will print even indexed elements in reverse order. So the array will look like {4, 1, 3}.

Constraints

1 <= N <= 10^5

1 <= arr[i] <= 10^6

Topic Tags

- **Math**

My code

// in java

```
import java.io.*;
import java.util.*;
public class Main {
    public static void main(String args[]) throws IOException {
        Scanner sc = new Scanner(System.in);

        int N = sc.nextInt();
        int arr[]=new int[N];
        for(int i=0;i<N;i++)
        arr[i]=sc.nextInt();

        Accio ob = new Accio();
        ArrayList<Integer> ans= ob.arrange(arr, N);

        for(int x:ans)
        System.out.print(x+" ");

        System.out.println();

    }
}

class Accio {
    ArrayList<Integer> arrange(int arr[], int n)
    {
        ArrayList<Integer> ans = new ArrayList<>();
        for(int i=0;i<n;i++)
        {
            if((i+1)%2!=0)
            ans.add(arr[i]);
        }
```

```
        for(int i=n-1;i>=0;i--)
        {
            if((i+1)%2==0)
            ans.add(arr[i]);
        }

        return ans;
    }
}
/*class Accio {
    ArrayList<Integer> arrange(int arr[], int n)
    {
        // your code here
                ArrayList<Integer> list=new ArrayList<Integer>();

                for(int i=0;i<n;i=i+2)
                        {
                                list.add(arr[i]);

                        }
                int t=n;//
                if(t%2==1)
                        t=t-2;
                else t=t-1;
        while(t>0)
                        {
                                list.add(arr[t]);
                                t=t-2;
                        }
                return list;
    }
}*/
```