

SET -2

Q1

```
import java.util.Scanner;
public class Q1_day4 {
    public static void main(String[] args) {

        int arr[] = new int[10];
        int res[] = new int[10];

        int left = 0;
        int right= 9;

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 10 numbers");

        for(int i=0;i<10;i++) {
            arr[i]=sc.nextInt();

            if(arr[i] % 2 == 0) {
                res[left++]=arr[i];
            }else {
                res[right--]=arr[i];
            }
        }

        for (int i : res) {
            System.out.print(i + " ");
        }
    }
}
```

Q2

```
import java.util.Arrays;
import java.util.Scanner;
public class Q2_day4 {

    public static void main(String[] args) {

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

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 5 numbers");

        for(int i=0;i<5;i++) {
            arr[i]=sc.nextInt();
        }

        Arrays.sort(arr);

        System.out.println("Enter no to find in array");
        key=sc.nextInt();

        int start = 0;
        int end = arr.length-1;
        boolean found = false;

        while(start<=end) {

            int mid = (start+end)/2;

            if(arr[mid] == key) {
                found =true;
                break;
            }
            else if(key < arr[mid]) {
                end = mid-1;
            }
            else {
                start = mid+1;
            }
        }

        if(found) {
            System.out.println("Number found in array");
        }
    }
}
```

```
        }else {  
            System.out.println("Number not found in array");  
        }  
    }  
}
```