

```
package Test3;

import java.util.Scanner;

//Q.1) Accept 10 number in an array. Display all even number at the beginning and all Odd at
//the end. Use only one loop
public class Que1 {
    public static void main(String[] args) {
        System.out.println("Enter the no: ");
        int []arr=new int[10];
        Scanner sc=new Scanner(System.in);

        for(int i=0;i<10;i++){
            arr[i]=sc.nextInt();
        }
        int left=0;
        int right=9;

        for(int i=0;i<=right;i++){
            if(arr[i]%2==0){
                int temp=arr[i];
                arr[i]=arr[left];
                arr[left]=temp;
                left++;
            }
            else{
                int temp=arr[i];
                arr[i]=arr[right];
                arr[right]=temp;
                right--;
                i--;
            }
        }
        for(int n:arr){
            System.out.print(n+" ");
        }
    }
}
```

```
package Test3;
```

```
import java.util.Arrays;  
import java.util.Scanner;
```

```
//.2) Accept 5 number in an array and sort it. Accept a number from user and check if it is  
//there in an array or not use binary search.
```

```
public class Que2 {
```

```
    public static void main(String[] args) {
```

```
        System.out.println("Enter the no:");
```

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

```
        Scanner sc = new Scanner(System.in);
```

```
        for (int i = 0; i < 5; i++) {
```

```
            arr[i] = sc.nextInt();
```

```
        }
```

```
        Arrays.sort(arr);
```

```
        System.out.println("Enter the no for Search:");
```

```
        int search = sc.nextInt();
```

```
        int left = 0, right = arr.length - 1;
```

```
        boolean found = false;
```

```
        while (left <= right) {
```

```
            int mid = (left + right) / 2;
```

```
            if (search == arr[mid]) {
```

```
                System.out.println(search + " found at index" + mid);
```

```
                found = true;
```

```
                break;
```

```
            } else if (search > arr[mid]) {
```

```
                left = mid + 1;
```

```
            } else if (search < mid) {
```

```
                right = mid - 1;
```

```
}
```

```
if (!found) {
```

```
    System.out.println(search + " not found");
```

```
}
```

}

}

}