

```
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 < arr[mid]) {
```

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

```
            }
```

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

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

```
        }
```

}
}
}