

MAIN()

```
Scan n      //No of students
Scan c      //Menu
While 1
    Switch c
        Case r : Call read_students(A, n)
                Break
        Case p: Call print_students(A, n)
                Break
        Case a: Call arrange_students(A, n)
                Break
        Case l: scan rval
                list_students(A, n, rval)
                Break
        Case t: return 0
```

READ_STUDENTS(A,n)

```
For i=1 to A.length
    Read A[i]
```

PRINT_STUDENTS(A, n)

```
For i=1 to A.length
    Print A[i]
```

ARRANGE_STUDENTS(A, n)

```
For i=2 to A.length
    temp=A[i]
    j=i-1
    While j>=0 and A[j]>temp
        A[j+1]=A[j]
        j=j-1
    A[j+1]=temp
For i=1 to A.length
    B[i]=A[n-i] // reverse order
For i=1 to A.length
    A[i]=B[i]
```

LIST_STUDENTS(A,n,rval)

```
count=0
For i=1 to A.length
    If A[i]==rval
        count=count+1
```

```
    print i
    A[i]=999000 // JUNK OR SENTINEL VALUE
If count==0
print -1
```