```
achyutjagini@Abhijays-Air Student Week 12 % ./a.out
5
4
-1 -1 -1 -1 -1
1 0
1 1
1 3
1 8
4
0 1 -1 3 8
2 0
29
-1 1 -1 3 8
3 8
YES
3 102
N0
0
```