FAST university has hired you to make an operating system for their lifts. Below are specifications of the lifts OS.

The lift will be placed in a building with 6 floors including a basement. From basement to top floors are labeled as -1,0,1,2,3,4 respectively. In the morning, the lift goes into operation from the basement. The lift can go up and down. If maintenance is required, the lift can be halted. If the lift is halted, the lift not usable during that period. Once unhalted, the lift can be used again.

All this lift data is stored in a doubly linked list. In case university decides to make a new floor, they can enter a new floor as floor 5. Moreover, due to some operational constraints, they might decide to choose that the lift should not stop on some floor for better load management. For example, the university can decide the lift will only operate on basement, 1st floor and 3rd floor then the lift will only operate on these floors. University can decide to change it and make it operational for all floors as well.