Assumption :-

While booking a room with a given date, the system might need to make choices between multiple rooms. Now, based on the choices it can accept or decline the next booking. current implemented logic is to book the room which has closest booking from previous date, and this will satisfy the complex test case given. But it is also possible to make choices which has closet boking from future dates. As, guest cannot chance the room one of the logics will work. Below is one complex request to demonstrate the scenario :

Room Size : -2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Roomno | Day0 | Day1 | Day2 | Day3 | Day4 | Day5 | Day6 |
| Room1 | x |  |  |  | x | x |  |
| Room2 | x | x |  |  |  | x |  |

Booking 1:- (0,0)

Booking 2:- (0,1)

Booking 3:- (5,5)

Booking 4:- (4,5)

Booking 5 :- (3,3)

Next Possible Booking :- (2,4) or (1,3)

In booking 5 if choose room 1 then (2,4) will pass but (1,3) will fail. In case chose room 2 then (1,3) will pass but (2,4) will fail. Currently , it will book room2.