

Elevator Open door



Instruction Manual

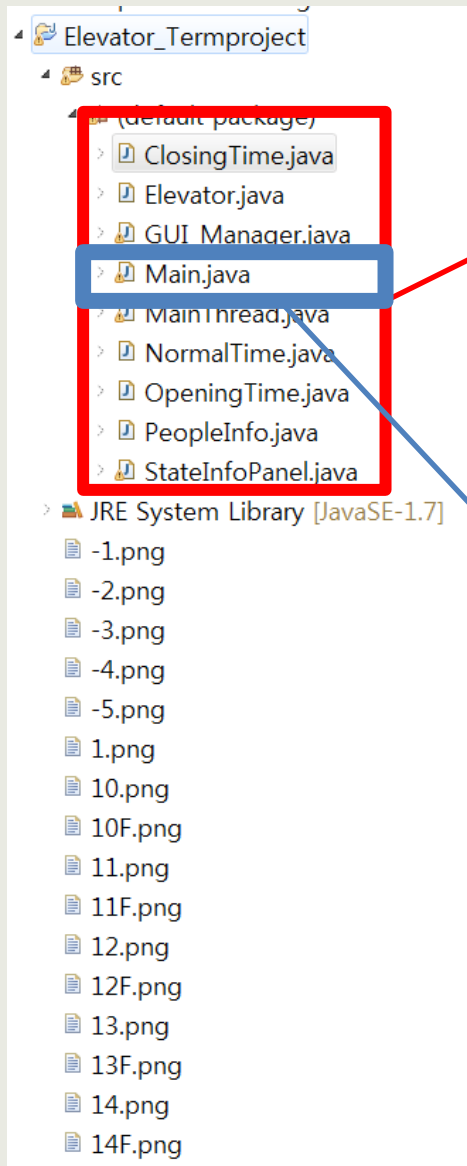
201232342 박재성
201332934 전아름
201533652 안연선
201533656 유지민

01

Operation Process

Open the door!

Demo video



First, open the **9** classes through the eclipse.

Execute the program in the **Main.java**.

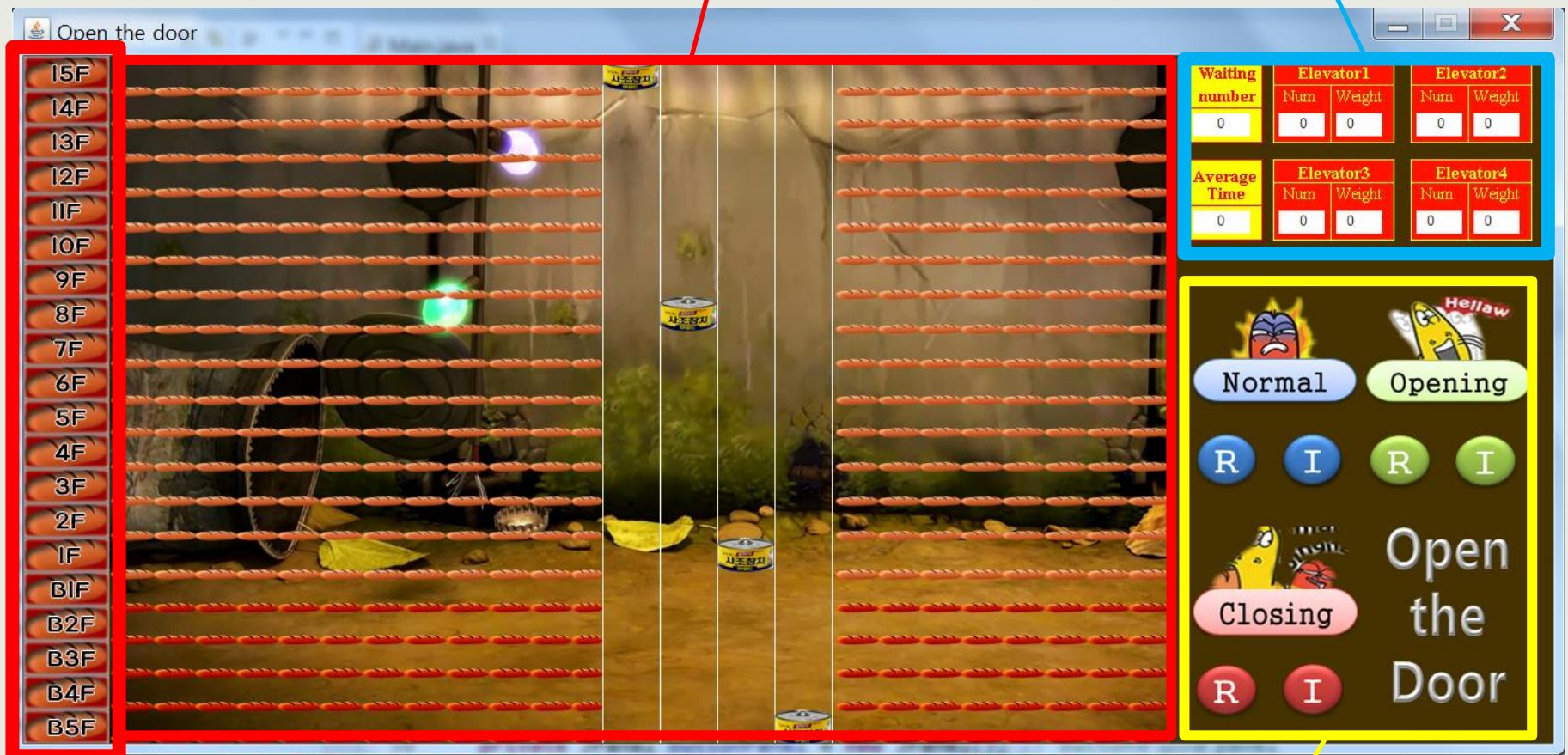
Open the door!

Demo video

<Open the door run screen>

Background

State_Information



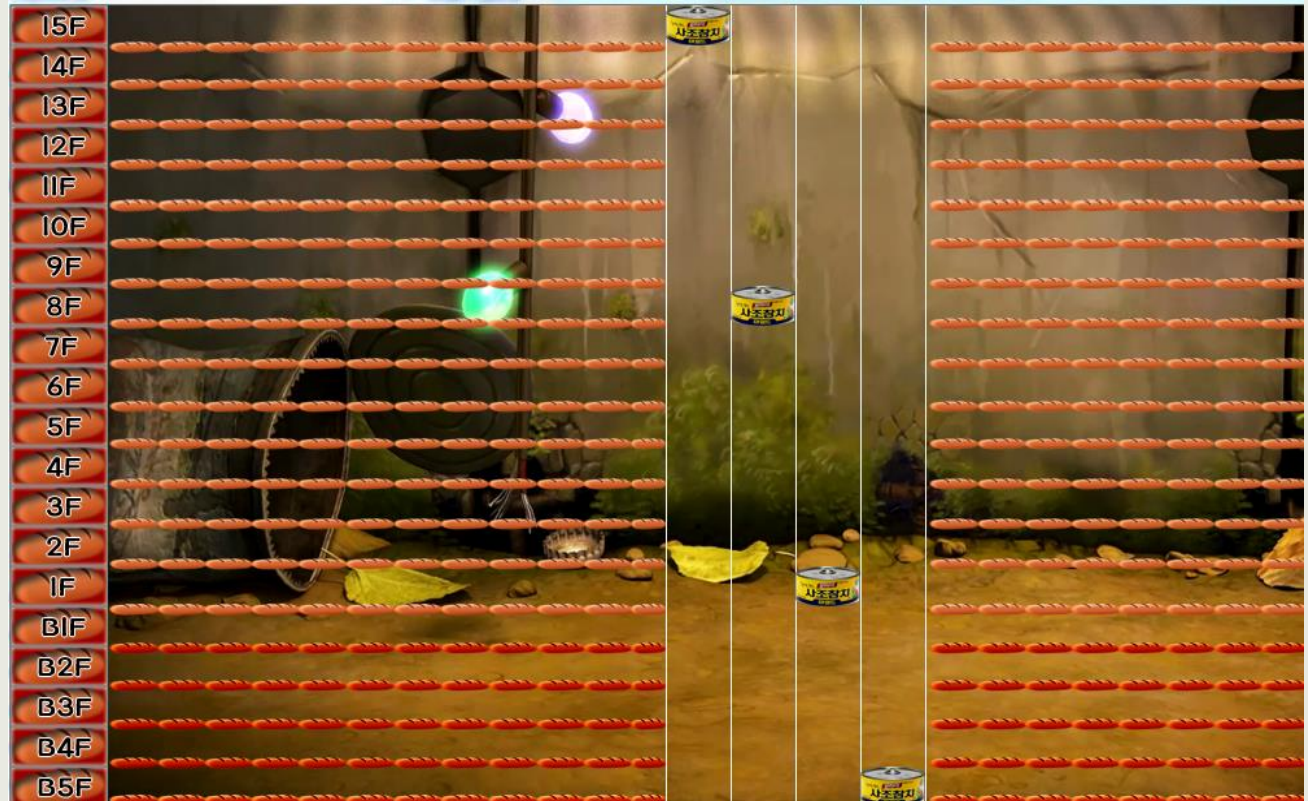
Remote reservation system

Create Lava button

Open the door!

Demo video

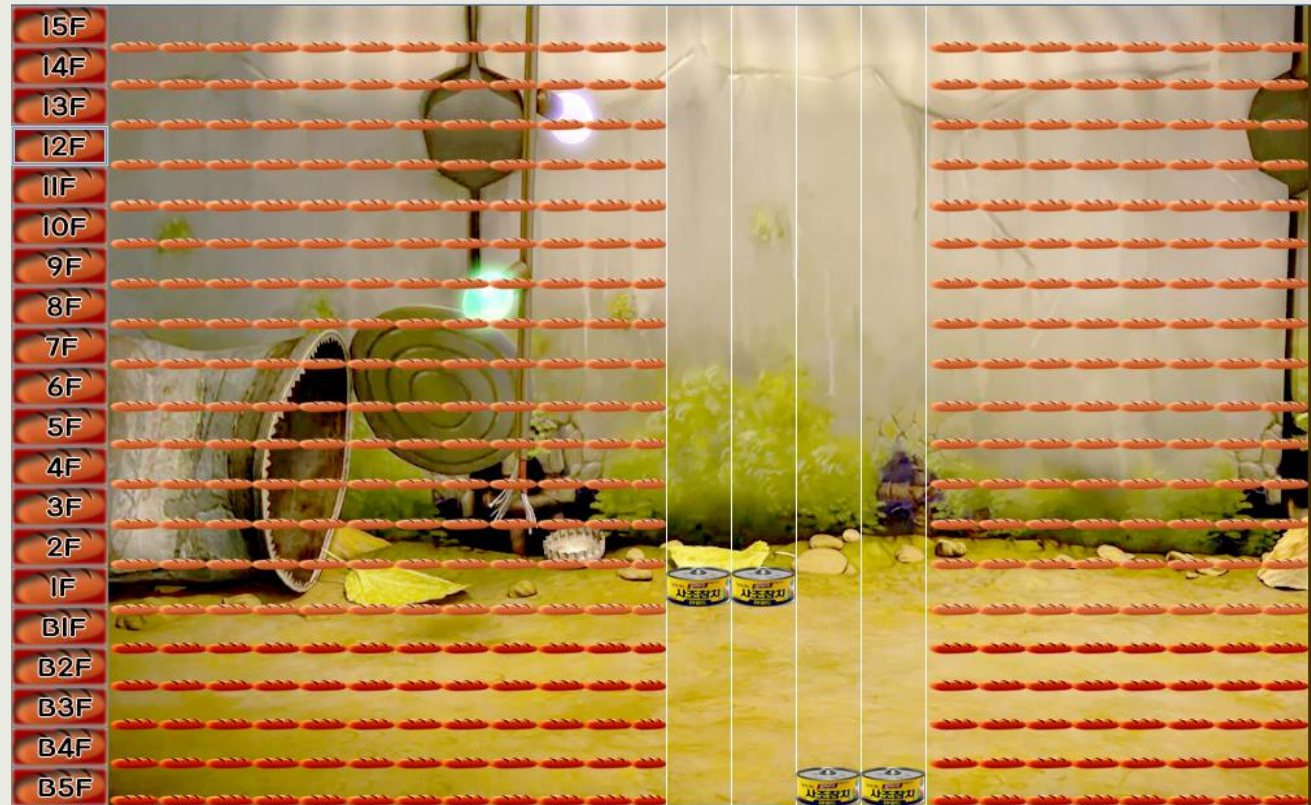
Click to change the status (Normal time – afternoon)



Elevators are located on the 15th, 8th, 1st and B5th floor

Demo video

The screenshot shows the 'Normal' and 'Opening' states of the door simulation. In the 'Normal' state, the door is closed, and the character is sad. In the 'Opening' state, the door is open, and the character is happy. The 'Opening' state is highlighted with a red box.



Elevators are located on the 1st and B5th floor

Open the door!

Demo video

Click to change the status (Closing time – night)

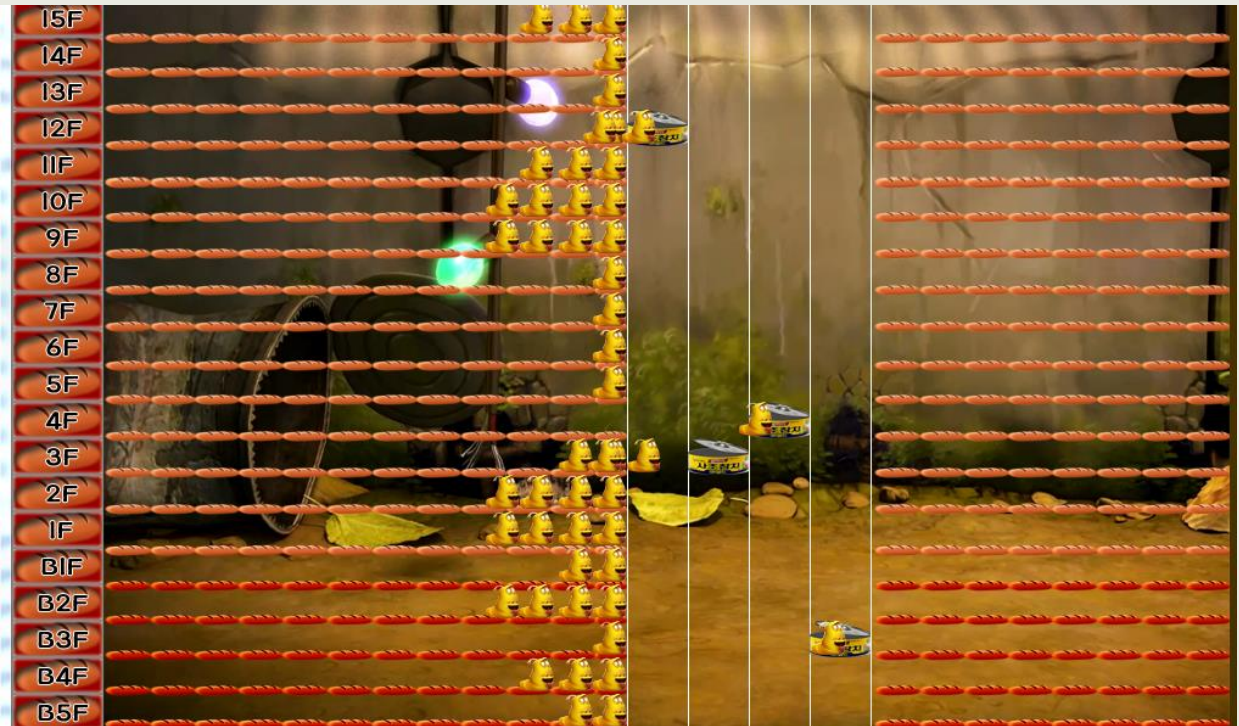


Elevators are located on the 6th, 10th, 15th and B5th floor

Open the door!

Demo video

If you click on it, you will see the lava.



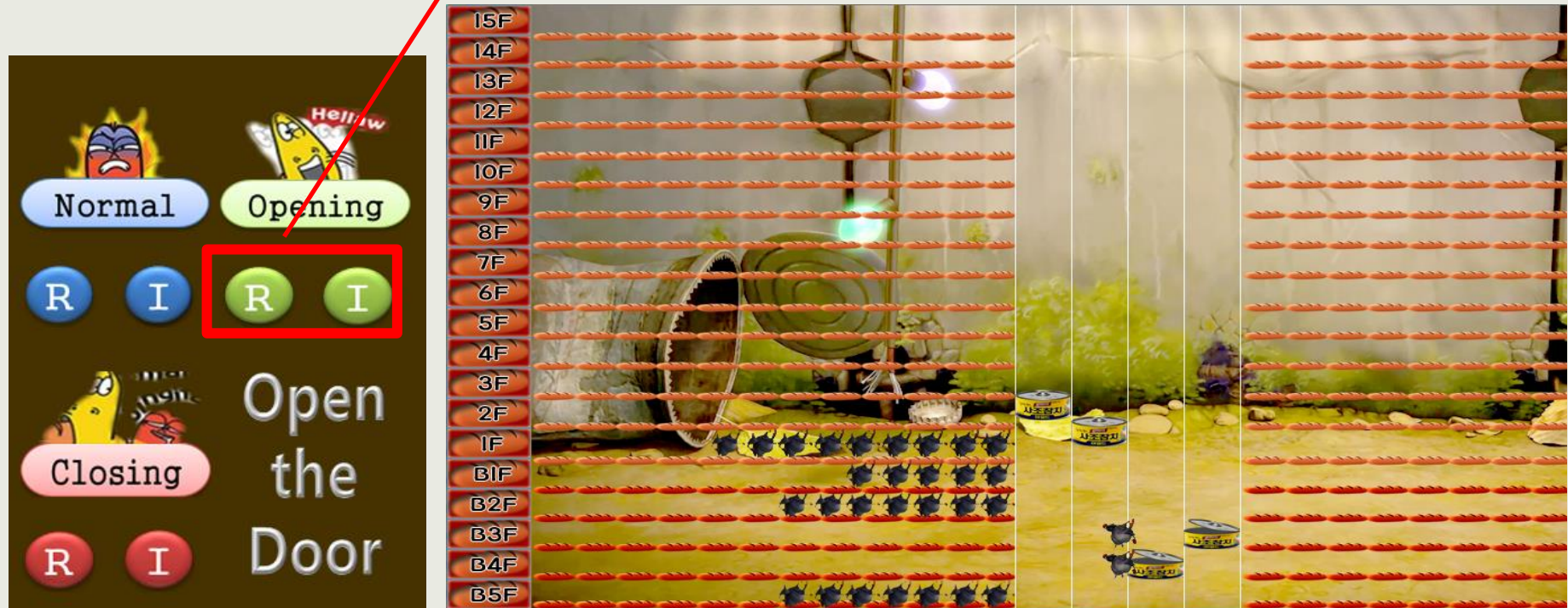
Click the R btn : A number of larvas are produced in all floors.
Click the I btn : A larva is produced in all floors.

*** Larvas' destinations are random floor.**

Open the door!

Demo video

If you click on it, you will see the lava.



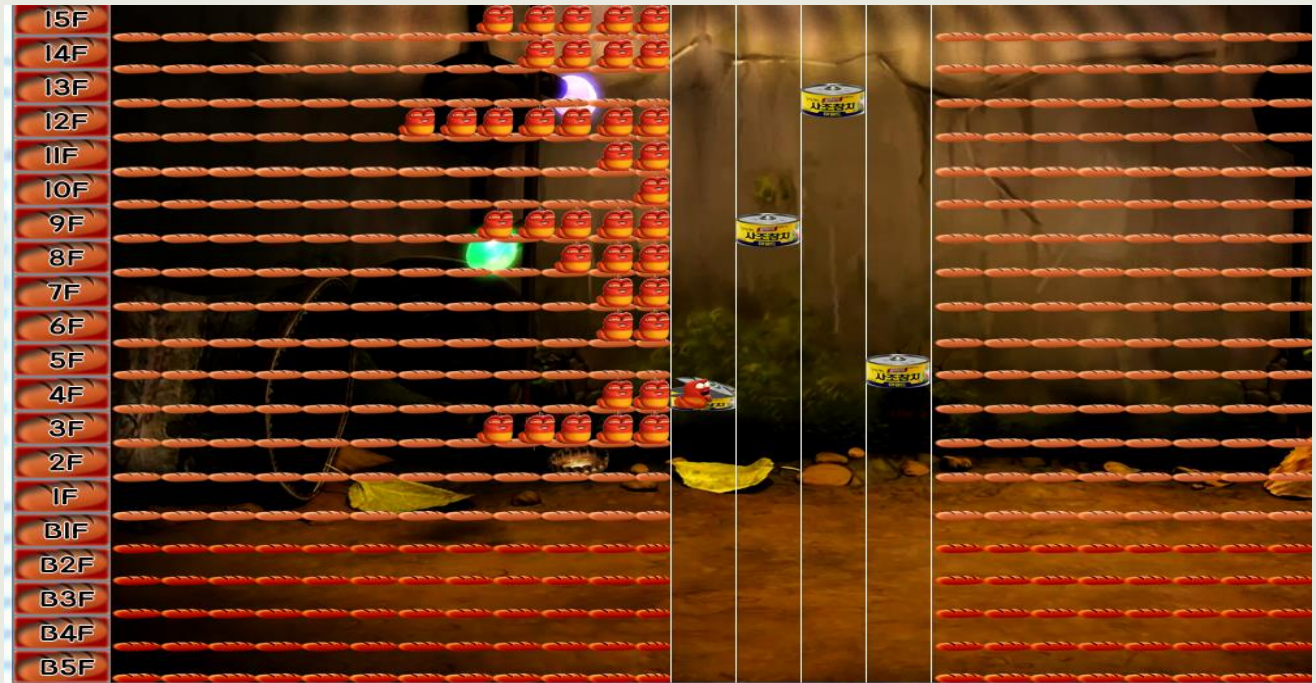
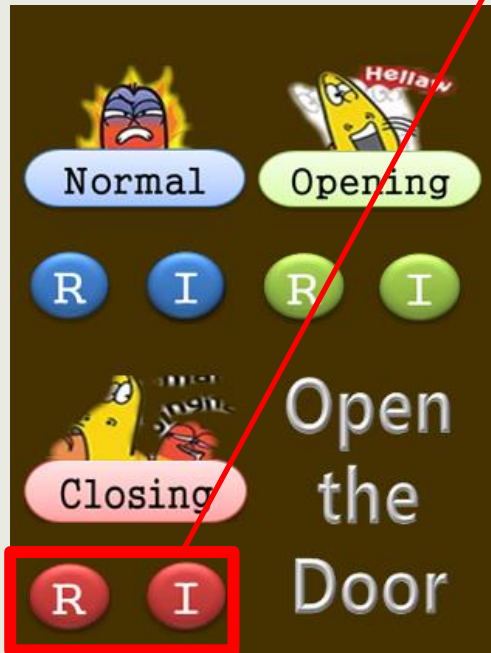
Click the R btn : A number of lavas are produced from 1st floor to B5th floor.
Click the I btn : A larva is produced from the 1st floor to the B5th floor.

*** Larvas' destinations are from 2nd floor to 15th floor.**

Open the door!

Demo video

If you click on it, you will see the lava.



Click the R btn : A number of larvas are produced from 3rd floor to 15th floor.
Click the I btn : A larva is produced from the 3rd floor to the 15th floor.

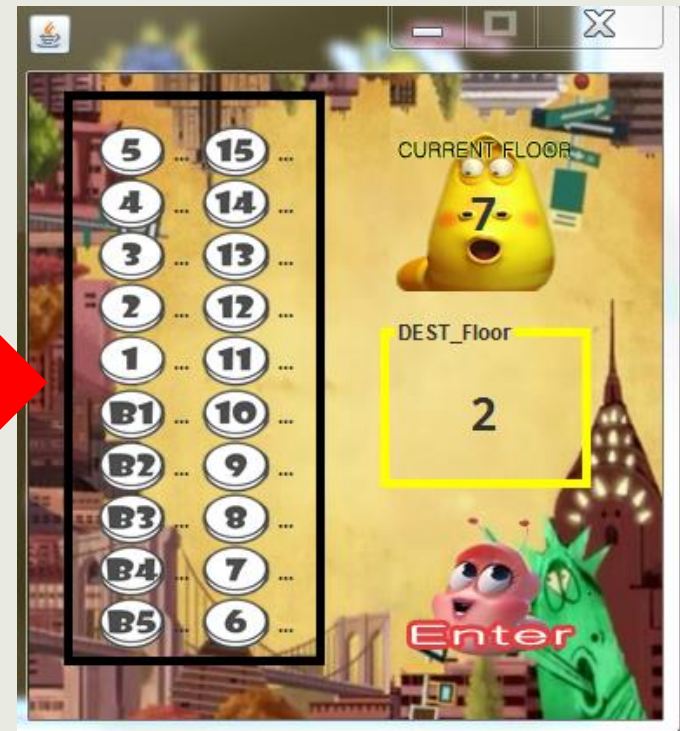
*** Larvas' destinations are from B5th floor to 1st floor.**

Open the door!

Demo video

- 15F
- 14F
- 13F
- 12F
- 11F
- 10F
- 9F
- 8F
- 7F
- 6F
- 5F
- 4F
- 3F
- 2F
- 1F
- B1F
- B2F
- B3F
- B4F
- B5F

Remote reservation system
Click any floor,



The remote control window is opened,
and the destination floor is reserved
when the reservation button is clicked.

Open the door!

Demo video

<Remote reservation system>

Open the door

Waiting number	Elevator1		Elevator2	
	Num	Weight	Num	Weight
1	10	500	7	350

Average Time	Elevator3		Elevator4	
	Num	Weight	Num	Weight
10	0	0	0	0

Normal Opening

R I R I

Closing Open the Door

R I

Given the highest priority and **can lift the elevator first.**

State Information

Waiting number	Elevator1		Elevator2	
64	Num	Weight	Num	Weight
	10	500	10	500
Average Time	Elevator3		Elevator4	
1	Num	Weight	Num	Weight
	7	350	10	500

Display the number of people and their weight currently on the elevator.
On the left, display the waiting people number and average waiting time.

< Average time >

(The time larva gets off the elevator - The time larva was created)
/ the number of Lava

<Efforts to minimize elevator waiting time>

1. In opening time, **Divide ground elev and underground elev.**
If all elev are underground, waiting time is twice as large.
2. In opening time, **Divide odd floor only and even floor only elev.**
Two times less waiting time than elev running all floors.
3. In closing time, **first elev up to 6th floor,**
second elev from 4th ~ 10th,
third elev from 8th ~ 15th,
In the above range, we divided the waiting.
4. **Common** : The 4th elev was used to **assist** the whole elevators
by running all floors

<Efforts to minimize elevator waiting time>

5. In opening time, closing time, using **S-can**, after dropping everyone, without going anywhere, they return to the initial position.
6. By adding remote reservation, so that the reserved larva can be taken first, use **priority scheduling**.

Thank you

