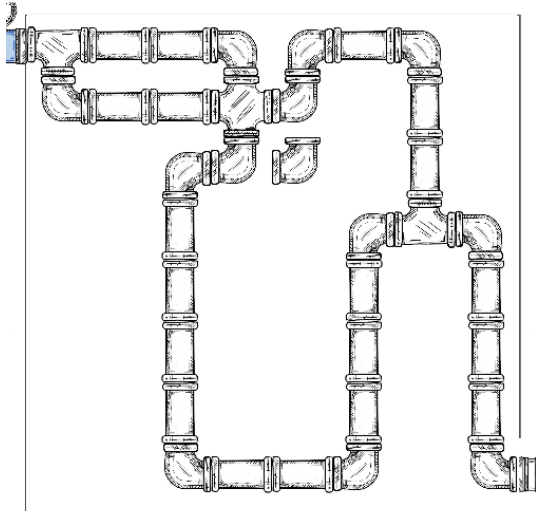


PA3 Grading Scheme

Test Map

```
[  
(0, 1), (2, 0), (2, 0), (1, 2), (1, 1), (2, 0), (1, 2), (4, 0),  
(1, 0), (2, 0), (2, 0), (3, 0), (1, 3), (4, 0), (2, 1), (4, 0),  
(4, 0), (4, 0), (1, 1), (1, 3), (1, 3), (4, 0), (2, 1), (4, 0),  
(4, 0), (4, 0), (2, 1), (4, 0), (4, 0), (1, 1), (0, 3), (1, 2),  
(4, 0), (4, 0), (2, 1), (4, 0), (4, 0), (2, 3), (4, 0), (2, 1),  
(4, 0), (4, 0), (2, 1), (4, 0), (4, 0), (2, 1), (4, 0), (2, 1),  
(4, 0), (4, 0), (2, 1), (4, 0), (4, 0), (2, 1), (4, 0), (2, 1),  
(4, 0), (4, 0), (1, 0), (2, 0), (2, 0), (1, 3), (4, 0), (1, 0)  
]
```



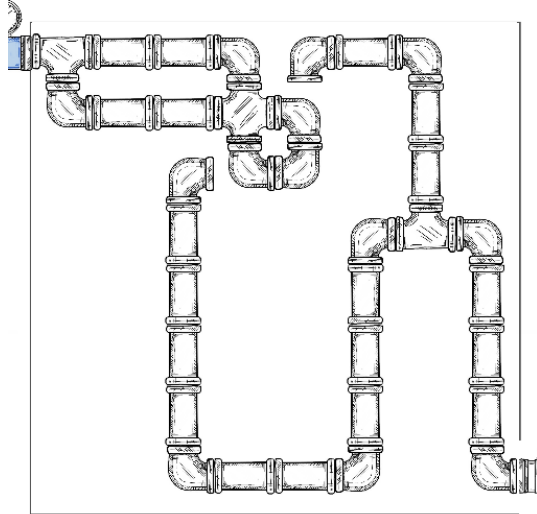
Grading Scheme

- Load and Save Records - 7.5
- Correct Loading of Maps - 7.5
- Gaming Pane (Rotation of blocks) - 10
- Leakage and connectivity check - 20
 - Leakage - 10
 - Connectivity - 10
- Success Animation - 15
- LCD Displays - 5

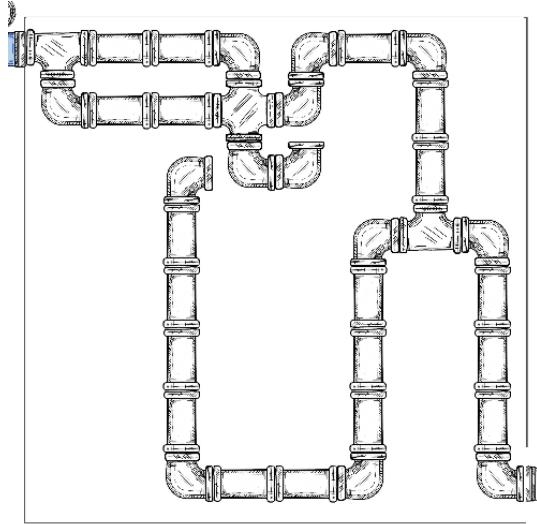
- Other Details - 10
 - Preventing double open of game window - 3
 - error messages in the Login Window - 3
 - preventing crash when click "done" during animation - 4

Test Procedure

- Put the modified map file in the maps folder and compile. (-10% if your code cannot be compiled due to minor bugs)
- Check whether two game window can be opened.
- Check the error message for level selection.
- Test 1
 - Check whether the map is loaded correctly.
 - Click the circled two blocks to the status shown in the picture. Then press "done", the program should give the message "water can not flow into the outlet".
 - Check whether the display of the current steps can be correctly updated.
 - Check whether the program will crash if click done button during the animation.

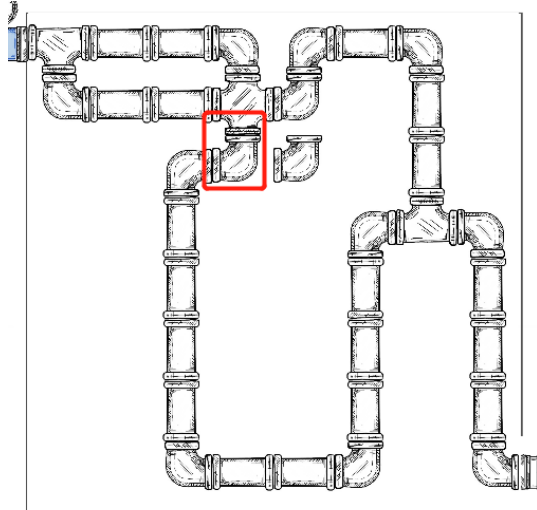


- Test 2
 - Open a new game window
 - Click the circled two blocks to the status shown in the picture. Then press "done", the program should give the message "there is leakage".



- Test 3

- Open a new game window
- Click the circled for 4 times and click "done", the animation should be played and the level should be passed.



- Test 4

- Open a new game window
- Check whether the "Min Step" has become "4"
- Press "done" without clicking any block, the animation should be played and the level should be passed

- Test 5

- Open a new game window and see whether the "Min Step" has become "0"

- Bonus

You will have 3/6/10 credits according to the creativity and complexity of your additional feature.