107 Data Structure Homework 1

Lake Problem(1)

- Design a maze (15 X 15)
 - Input : read file (input.txt)
 - 0 : land (not have water)
 - $1 \sim 4$: depth of water (from shallow to deep)
 - Number of zero > 50 %
 - $-N\cdot W\cdot S\cdot E$
- Find the lake with the most water
 - Print Page 3 and Page 5 (20%)
 - Print the coordinates of the biggest lake (20%)
 - Print the total number of the water that is the biggest lake (20%)

0	4	1	0	4	1	0	0	0	1
2	2	0	4	0	0	2	0	4	3
0	1	0	0	0	0	0	3	0	2
4	3	0	0	4	0	4	4	2	1
0	0	0	0	0	1	0	0	0	0
4	1	0	4	4	4	0	0	4	0
3	2	0	0	0	3	0	0	1	0
3	2	0	4	0	0	3	0	0	0
4	0	1	1	3	0	3	3	0	0
1	4	3	0	4	0	0	0	4	0

0	4	1	0	4	1	0	0	0	1
2	2	0	4	0	0	2	0	4	3
0	1	0	0	0	0	0	3	0	2
4	3	0	0	4	0	4	4	2	1
0	0	0	0	0	1	0	0	0	0
4	1	0	4	4	4	0	0	4	0
3	2	0	0	0	3	0	0	1	0
3	2	0	4	0	0	3	0	0	0
4	0	1	1	3	0	3	3	0	0
1	4	3	0	4	0	0	0	4	0

*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
4	1	*	*	*	*	*	*	*	*
3	2	*	*	*	*	*	*	*	*
3	2	*	4	*	*	*	*	*	*
4	*	1	1	3	*	*	*	*	*
1	4	3	*	4	*	*	*	*	*

Lake Problem(2)

- Design a maze (15 X 15)
 - Input : read file (input.txt)
 - 0 : land (not have water)
 - $1 \sim 4$: depth of water (from shallow to deep)
 - Number of zero > 50 %
 - $-N \cdot W \cdot S \cdot E$
 - N and S connected
 - W and E connected
- Find the lake with the most water after connect
 - Print the coordinates of the biggest lake(20%)
 - Print the total number of the water that is the biggest lake (20%)

0	4	1	0	4	1	0	0	0	1
2	2	0	4	0	0	2	0	4	3
0	1	0	0	0	0	0	3	0	2
4	3	0	0	4	0	4	4	2	1
0	0	0	0	0	1	0	0	0	0
4	1	0	4	4	4	0	0	4	0
3	2	0	0	0	3	0	0	1	0
3	2	0	4	0	0	3	0	0	0
4	0	1	1	3	0	3	3	0	0
1	4	3	0	4	0	0	0	4	0

0	4	1	0	4	1	0	0	0	1
2	2	0	4	0	0	2	0	4	3
0	1	0	0	0	0	0	3	0	2
4	3	0	0	4	0	4	4	2	1
0	0	0	0	0	1	0	0	0	0
4	1	0	4	4	4	0	0	4	0
3	2	0	0	0	3	0	0	1	0
3	2	0	4	0	0	3	0	0	0
4	0	1	1	3	0	3	3	0	0
1	4	3	0	4	0	0	0	4	0

*	4	1	*	4	1	*	*	*	*
2	2	*	*	*	*	*	*	*	*
*	1	*	*	*	*	*	*	*	*
4	3	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
4	1	*	*	*	*	*	*	*	*
3	2	*	*	*	*	*	*	*	*
3	2	*	4	*	*	*	*	*	*
4	*	1	1	3	*	*	*	*	*
1	4	3	*	4	*	*	*	*	*

- Send code
- Only accepted C
- Homework upload to **iLearning** platform
- Deadline: 2018/10/17(三) 23:59
- · 檔名: main.c
- 抄襲嚴懲,請打上註解不然不計分