

Testing

inputted values	Expected output	Actual meet
-14 -99	wrong input	Yes
3 9999	wrong input	Yes
a.out -r 3 -test	Print usage info	Yes
a.out -r 5 -m 3 -c 4	Print an grid with row:5; mine3; cds:4	Yes

Design

1. 2D Dynamic Array

'0 -8' hint

'x' flag

'*' boom!

random

hidden

```
0 0 6
0 X 0
0 0 0
[] [] []
[] [] []
[] [] []
```

✓

2. Play again

1. Yes → play again

2. No → exit

<Struct>

3. error

- invalid input checker

- input a cell which has already open.
return to choose

- invalid row / column for flag
return to choose.

* random mine

mine \rightarrow '*'

random Put '*' to

[]	[]	[]
[]	[]	[]
[]	[]	[]

(1) random number generator: 0 or 1 ✓

<2> if else statement ✓

if = 0 \Rightarrow '0' || else \Rightarrow '*'

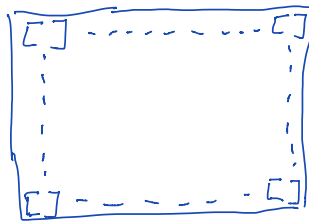
<3> Put [] and [*] \Rightarrow

[]	[]	[]
[]	[*]	[*]
[]	[]	[]
-	-	-

if { } else :

Scan: [0] \rightarrow if mine exist around, 0++ (*mine)

Special situations :



if open '0': check around 8.
if is '0', open.



a.out -r 9 -c 9 -m 10

a.out

How many row, columns? 9 9
mines? 10

open(1) or flag(2)?

row, col ≥ 9 0
cin \Rightarrow rows \Rightarrow cols ;

rows

columns

mines

/a.out -r 3 -c 5 -m 2

* if sth after dash != r, c, m
* dashes have to before int.

* # args is correct.