Test

1. User input validation

1. **out of range**

```
    1   2   3   4   5   6   7   8   9
  ---------------------------------------
| * | * | * | * | * | * | * | * | * | 1
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 2
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 3
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 4
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 5
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 6
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 7
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 8
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 9
  ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 11 12
invalid input, your input is 11 12
Please you enter a space between row and col (e.g. 1 2)
Please make sure entered number in range of [1 9]
Press any key to continue!
Awaiting your response ...
```

2. wrong format

```
      1   2   3   4   5   6   7   8   9
    _____
   | * | * | * | * | * | * | * | * | * | 1
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 2
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 3
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 4
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 5
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 6
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 7
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 8
    ___ ___ ___ ___ ___ ___ ___ ___ ___
   | * | * | * | * | * | * | * | * | * | 9
    ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 12
Please you enter a space between row and col (e.g. 1 2)
Press any key to continue!
Awaiting your response ...
```

3. digital number

```
   1   2   3   4   5   6   7   8   9
------------------------------------------
| * | * | * | * | * | * | * | * | * | 1
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 2
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 3
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 4
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 5
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 6
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 7
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 8
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | * | * | * | 9
 ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 5.6 6
invalid input, your input is 5.6 6
Please you enter a space between row and col (e.g. 1 2)
Please make sure entered number in range of [1 9]
Press any key to continue!
Awaiting your response ...
```

2. **win or lose**

1. lose

```
    1   2   3   4   5   6   7   8   9
  ----------------------------------------
|   |   |   |   |   | M |   |   |   | 1
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | M |   | M |   |   |   | M |   | 2
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   | M |   |   | 3
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   |   |   |   | 4
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   | 1 |   |   | M | 5
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   | M |   |   |   |   | 6
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   | M |   |   |   | 7
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   | M |   |   | 8
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | M |   |   |   |   |   |   |   | 9
  ___ ___ ___ ___ ___ ___ ___ ___ ___
The location you selected row (6) col(5) is a Mine
game Over ..., you lose
```

2. win

```
    1   2   3   4   5   6   7   8   9
  ----------------------------------------
| * | * | * | * | 1 |   |   |   |   | 1
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 1 |   |   |   |   | 2
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 | 1 | 1 |   |   | 3
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | * | * | 1 |   |   | 4
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 | 1 | 1 |   |   | 5
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 |   |   |   |   | 6
  ___ ___ ___ ___ ___ ___ ___ ___ ___
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
  ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   | 1 | * | * | 9
  ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 9 1
```

```
   1   2   3   4   5   6   7   8   9
 _____
|   | 1 | * | 1 |   |   |   |   |   | 1
 _____
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 _____
|   | 1 | * | * | 2 | 1 | 1 |   |   | 3
 _____
| 1 | 2 | * | * | * | * | 1 |   |   | 4
 _____
| * | * | * | * | 2 | 1 | 1 |   |   | 5
 _____
| * | * | * | * | 2 |   |   |   |   | 6
 _____
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 _____
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 _____
|   |   |   |   |   |   | 1 | * | * | 9
 _____
Enter the location you want to mine: (row col) : 1 1
```

```
   1   2   3   4   5   6   7   8   9
 _____
|   |   | 1 | 1 | 1 |   |   |   |   | 1
 _____
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 _____
|   | 1 | * | * | 2 | 1 | 1 |   |   | 3
 _____
| 1 | 2 | * | * | * | * | 1 |   |   | 4
 _____
| * | * | * | * | 2 | 1 | 1 |   |   | 5
 _____
| * | * | * | * | 2 |   |   |   |   | 6
 _____
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 _____
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 _____
|   |   |   |   |   |   | 1 | * | * | 9
 _____
Enter the location you want to mine: (row col) : 1 4
```

```
     1   2   3   4   5   6   7   8   9
   _____
  |   |   | 1 | 1 | 1 |   |   |   |   | 1
   ___
  |   | 1 | 2 | * | 1 |   |   |   |   | 2
   ___
  |   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
   ___
  | 1 | 2 | * | * | * | * | 1 |   |   | 4
   ___
  | * | * | * | * | 2 | 1 | 1 |   |   | 5
   ___
  | * | * | * | * | 2 |   |   |   |   | 6
   ___
  | 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
   ___
  |   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
   ___
  |   |   |   |   |   |   | 1 | * | * | 9
   ___
Enter the location you want to mine: (row col) : 3 4
```

```
     1   2   3   4   5   6   7   8   9
   _____
  |   |   | 1 | 1 | 1 |   |   |   |   | 1
   ___
  |   | 1 | 2 | * | 1 |   |   |   |   | 2
   ___
  |   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
   ___
  | 1 | 2 | 2 | * | * | * | 1 |   |   | 4
   ___
  | * | * | * | * | 2 | 1 | 1 |   |   | 5
   ___
  | * | * | * | * | 2 |   |   |   |   | 6
   ___
  | 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
   ___
  |   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
   ___
  |   |   |   |   |   |   | 1 | * | * | 9
   ___
Enter the location you want to mine: (row col) : 4 3
```

```
    1   2   3   4   5   6   7   8   9
 _____
|   |   | 1 | 1 | 1 |   |   |   |   | 1
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| 1 | 2 | 2 | 1 | * | * | 1 |   |   | 4
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 | 1 | 1 |   |   | 5
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 |   |   |   |   | 6
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   | 1 | * | * | 9
 ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 4 4
```

```
    1   2   3   4   5   6   7   8   9
 _____
|   |   | 1 | 1 | 1 |   |   |   |   | 1
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| 1 | 2 | 2 | 1 | 1 | * | 1 |   |   | 4
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 | 1 | 1 |   |   | 5
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| * | * | * | * | 2 |   |   |   |   | 6
 ___ ___ ___ ___ ___ ___ ___ ___ ___
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 ___ ___ ___ ___ ___ ___ ___ ___ ___
|   |   |   |   |   |   | 1 | * | * | 9
 ___ ___ ___ ___ ___ ___ ___ ___ ___
Enter the location you want to mine: (row col) : 4 5
```

```
    1   2   3   4   5   6   7   8   9
_____
|   |   | 1 | 1 | 1 |   |   |   |   | 1
 _____
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 _____
|   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
 _____
| 1 | 2 | 2 | 1 | 1 | * | 1 |   |   | 4
 _____
| 2 | * | * | * | 2 | 1 | 1 |   |   | 5
 _____
| * | * | * | * | 2 |   |   |   |   | 6
 _____
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 _____
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 _____
|   |   |   |   |   |   | 1 | * | * | 9
 _____
Enter the location you want to mine: (row col) : 5 1
```

```
    1   2   3   4   5   6   7   8   9
_____
|   |   | 1 | 1 | 1 |   |   |   |   | 1
 _____
|   | 1 | 2 | * | 1 |   |   |   |   | 2
 _____
|   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
 _____
| 1 | 2 | 2 | 1 | 1 | * | 1 |   |   | 4
 _____
| 2 | * | 3 | * | 2 | 1 | 1 |   |   | 5
 _____
| * | * | * | * | 2 |   |   |   |   | 6
 _____
| 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 _____
|   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 _____
|   |   |   |   |   |   | 1 | * | * | 9
 _____
Enter the location you want to mine: (row col) : 5 3
```

```
     1   2   3   4   5   6   7   8   9
   -------------------------------------
 |   |   | 1 | 1 | 1 |   |   |   |   | 1
 |   | 1 | 2 | * | 1 |   |   |   |   | 2
 |   | 1 | * | 2 | 2 | 1 | 1 |   |   | 3
 | 1 | 2 | 2 | 1 | 1 | * | 1 |   |   | 4
 | 2 | * | 3 | 2 | 2 | 1 | 1 |   |   | 5
 | * | * | * | * | 2 |   |   |   |   | 6
 | 1 | 2 | 3 | * | 2 |   |   | 1 | 1 | 7
 |   |   | 1 | 1 | 1 |   | 1 | 2 | * | 8
 |   |   |   |   |   |   | 1 | * | * | 9
Enter the location you want to mine: (row col) : 5 4
```

```
     1   2   3   4   5   6   7   8   9
   -------------------------------------
 |   |   | 1 | 1 | 1 |   |   |   |   | 1
 |   | 1 | 2 | M | 1 |   |   |   |   | 2
 |   | 1 | M | 2 | 2 | 1 | 1 |   |   | 3
 | 1 | 2 | 2 | 1 | 1 | M | 1 |   |   | 4
 | 2 | M | 3 | 2 | 2 | 1 | 1 |   |   | 5
 | M | 3 | M | M | 2 |   |   |   |   | 6
 | 1 | 2 | 3 | M | 2 |   |   | 1 | 1 | 7
 |   |   | 1 | 1 | 1 |   | 1 | 2 | M | 8
 |   |   |   |   |   |   | 1 | M |   | 9
game Over ..., you win
>>
```