Note: words in red are player input and words in black are system’s output.

\*\*Since there are 5 maps and the system will randomly choose one map for player to play, and also since the entrance and endpoint are randomly assigned in each round, so you will not get the same output even if you input the same things as the three samples.\*\*

Welcome to the game landmine.

You will start at a point on the first column from left (called entrance) and aim to arrive at the destination on the last column on the right.

The system will tell which point you are now staying at. You could move upward, leftward, downward or rightward by 1 step each time.

input 'w' to move upwards, 's' to move downwards, 'd' to move right , 'a' to move left.(only lower character will be valid)

steps estimation: you need to input a number to estimate the steps you need to complete the game (if the estimation is far away from the actual number of movements you take, many marks will be deducted.)

You have 3 bloods. Whenever you reach the landmines, 1 blood is deducted and you will be sent back randomly to one of the points in the first column (may not be the same as the entrance mentioned above).

The system will provide you with numbers of total landmines within 3\*3 square (the current location is the centre of the square).

special bonus: There is 1 healing pack in each map, when the player reaches that point, 1 blood is added (only available once in each round)

special tools: when you press 'p'(lower character!) you can jump 2 steps at one time(can jump over landmine and walls).

Note: let say your current position is (2,2) and (2,4) is a wall, and you input 'p' and then 'd', your movement is invalid because you reach a wall. However, the special tool will not be depleted in this case. If you want to use it again, you must input 'p' again before your movement.

If you run into wall or exceed boundary after using special tool, steps will be counted.

The winning condition : the player could reach the exit without using up all the 3 drops of blood.

mark calculation: 1.each remaining blood worth 100 marks

2.reaching heal\_pack can earn 200 marks

3.total steps less than 30 can earn marks(20 marks each movement)

4.total steps more than 40 will lose marks(8 marks each movement)

5.estimation error will lose marks(one absolute error will result in 8 marks deduction )

The landmine will not disappear after you run into it.

Input the expected number of movement you need to reach end point: 30

x x x x x x x x x x

O x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 1 0

Number of landmines around you: 1

You have 3 blood(s).

Please input your next action: s

x x x x x x x x x x

x x x x x x x x x x

O x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 2 0

Number of landmines around you: 0

You have 3 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x O x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 2 1

Number of landmines around you: 1

You have 3 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x O x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 2 2

Number of landmines around you: 2

You have 3 blood(s).

Please input your next action: d

You reach a landmine!

Go back and try again!

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

O x x x x x x x x x

Your current position is: 9 0

Number of landmines around you: 0

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x O x x x x x x x x

Your current position is: 9 1

Number of landmines around you: 0

You have 2 blood(s).

Please input your next action: w

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x O x x x x x x x x

x x x x x x x x x x

Your current position is: 8 1

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x O x x x x x x x

x x x x x x x x x x

Your current position is: 8 2

Number of landmines around you: 1

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x O x x x x x x

x x x x x x x x x x

Your current position is: 8 3

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: w

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x O x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 7 3

Number of landmines around you: 1

You have 2 blood(s).

Please input your next action: d

This is a wall, you cannot pass through it.

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x x x

x x x O x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 7 3

Number of landmines around you: 1

You have 2 blood(s).

Please input your next action: w

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x O x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 3

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: w

This is a wall, you cannot pass through it.

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x O x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 3

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: p

You are now using special tool, please input your movement: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x O x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 5

Number of landmines around you: 1

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x O x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 6

Number of landmines around you: 1

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x O x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 7

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: d

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

x x x x \* x x x x x

x x x x x x x x O x

x x x x x x x x x x

x x x x x x x x x x

x x x x x x x x x x

Your current position is: 6 8

Number of landmines around you: 2

You have 2 blood(s).

Please input your next action: d

Congratulation, you reach the endpoint!

You win!

You have used 17 to reach the endpoint.

Your final mark is: 356