

Sample expected output for question 2 version 1 (Simulation of Pacman Game)

The following screen show the resulting output after a direction key is pressed.
Coordinate is (row number, column number). The following direction key is used
The symbols are

1 : wall P: pacman *: food

Keyboard control

w (up) , a (left), d (right), z (down)

Pacman accumulate points if move into location with food.

Start of Pacman game

```
|||||
*|*P*|
|    **|
|*****|
|*****|
|||||

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 2 3 0 2 0 0 0 0 0 1
1 0 0 0 0 2 2 0 0 0 0 0
1 2 2 2 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 0
Pacman at position (1, 3)
enter move >> _
```

Player enter >> a (left)

```
|||||
*|P*|
|    **|
|*****|
|*****|
|||||

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 3 0 0 2 0 0 0 0 0 1
1 0 0 0 0 2 2 0 0 0 0 0
1 2 2 2 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 1
Pacman at position (1, 2)
enter move >> _
```

Player enter >> z (down)

```
| | | | | | | | | |
* |      *      |
|  p   **      |
| ***** | | | | |
| ***** |
| | | | | | | | | |

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 0 0 0 2 0 0 0 0 0 1
1 0 3 0 0 2 2 0 0 0 0 0
1 2 2 2 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 1
Pacman at position (2, 2)
enter move >>
```

Player enter >> z (down)

```
| | | | | | | | | |
* |      *      |
|      **      |
| *p*** | | | | |
| ***** |
| | | | | | | | | |

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 0 0 0 2 0 0 0 0 0 1
1 0 0 0 0 2 2 0 0 0 0 0
1 2 3 2 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 2
Pacman at position (3, 2)
enter move >> █
```

Player enter >> d (right)

```
|||||
*|  *|
|  **|
|* P**||
*****|
|||||

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 0 0 0 2 0 0 0 0 0 1
1 0 0 0 0 2 2 0 0 0 0 0
1 2 0 3 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 3
Pacman at position (3, 3)
enter move >>
```

Player enter >> w (up)

```
|||||
*|  *|
|  P **|
|*  **||
*****|
|||||

Num rows = 6
Num columns = 12

1 1 1 1 1 1 1 1 1 1 1 1
2 1 0 0 0 2 0 0 0 0 0 1
1 0 0 3 0 2 2 0 0 0 0 0
1 2 0 0 2 2 1 1 1 1 1 1
2 2 2 2 2 2 2 2 2 2 2 1
1 1 1 1 1 1 1 1 1 1 1 1
Your collected points = 3
Pacman at position (2, 3)
enter move >>
```