

KodeKombat is an Artificial Intelligence programming contest. The game this year is a variation of Pacman. It is a two player game where in each player controls his pacman and four ghosts. They compete against each other to keep their pacman alive and get maximum number of pellets. The game ends when either of the pacman is eaten by any of the eight ghosts (opponent's and the player's) or when the number of moves is thousand.

The player's bot has to read the state of the map from standard input and provide the moves for his pacman and ghosts to the standard output.

Languages accepted- Any language that can take input from standard input and print moves to standard output.

Input Format:

- The player takes the input from the standard input.
- First line has two integers representing number of rows and columns in the map state.
- From the next line each row of the map is given.
- The map has elements in character data type.
 - A, B, C, D - the ghosts controlled by the player
 - a, b, c, d - ghosts of the opponents
 - P - pacman controlled by the player
 - p - pacman of the opponent
 - If both pacmen coincide only P is shown
 - e - Pellet
 - E - power pellet
 - W - Wall
 - . - eaten pellet
- After the map, there are two integers, the first integer indicating the number of moves left where the player's pacman can eat the ghosts and the second integer indicating the number of moves left where the opponent's pacman can eat the ghosts after eating a power pellet.

Output Format:

- The output should be given to the standard output. It should consist of five integers ranging from 1 to 4- A B C D P ,Where A, B, C and D represent the moves of the ghosts and P that of the pacman.
 - 1-up
 - 2-down
 - 3-left
 - 4-right
- OUTPUT ERROR- output error is when the moves are not valid i.e either all the five moves are not specified or they are out of the given range [1-4]

Rules:

- Eating a pellet increases score by one
- Eating a power pellet increases score by ten and all the ghosts become inactive for next ten moves, the pacman can eat the ghosts. Eating the ghost increases the score by five.
- The ghosts cannot cross over.
- The player who wins gets a bonus of 50 points.

Game End:

The game ends in any of the following condition:

- When one of the pacmen or both pacmen are eaten by any of the eight ghosts.
- After 1000 exectutions.
- When there is
 - Compile Error
 - Run Time Error
 - Time limit exceeded(Maximum valid time for each execution is 5 seconds)
 - Output Error

Submission of code:

- The submitted code should be linux compatible.
- A compressed folder (tar or zip) consisting of the player's code and the makefile.
- Folder name, the compressed folder name should be the same as the executable i.e the players bot's name.
- The bot's name should consist of only alphabets and should not exceed eight characters.
- For further information please refer the tutorials (<http://www.engineer.org.in/kodekombat/tutorials>)