Problem E. Child's Game with Robot

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	256 mebibytes

This is an interactive problem.

Little Misha plays a child's game with a robot. In this game, the robot stands on a field which is divided into 3×3 squares and surrounded by borders. The game begins at the center square and consists in making ten actions. Each action is either declamation of a phrase or an attempt to move into one of the neighboring squares. Declamation is used to wait, or simply for amusement.

One of the squares is special, but Misha does not know in advance which one. The robot reports when it moves into the special square. The goal of the game is to move into the special square precisely during the tenth action.

To communicate with the robot, Misha uses text input and output. The following commands are recognized:

- `echo` *phrase* — declamation of *phrase*,
- `move north` — moving one square to the north,
- `move east` — moving one square to the east,
- `move south` — moving one square to the south,
- `move west` — moving one square to the west.

For each declamation command, the robot loudly reads the given phrase, and also prints it back in text. During a declamation, the robot does not move. The robot is guaranteed to correctly handle phrases which consist of characters with ASCII codes from 32 to 126 inclusive and are at most 256 characters long.

For each movement command, the robot prints back one of the four words:

- `bump` if instead of moving, the robot hit a barrier, in which case, it remains on the same square,
- `moved` if the robot successfully moved into a common square,
- `found` if the robot moved into the special square during one of the first nine actions,
- `win` if the robot moved into the special square during the tenth action.

Help Misha to play this game in such a way that, during the tenth action, the robot prints the desired word `win`.

Interaction Protocol

The solution must print commands to the standard output, one command per line. To prevent output buffering, flush the output buffer after each command you issue: this can be done by using, for example, `fflush (stdout)` in C or C++, `System.out.flush ()` in Java, `flush (output)` in Pascal or `sys.stdout.flush ()` in Python.

The answer for each command is printed back to the solution's standard input on a separate line.

After printing ten commands, the solution must terminate correctly.

Example

In the given example, the special square lies to the east from the center. It is guaranteed that this test will be the first when checking your solution.

The commands (solution's **output**) are given on the left, and the answers for them (solution's **input**) are on the right.

command	answer
move north	moved
move east	moved
move south	found
move west	moved
move east	found
move east	bump
move south	moved
echo Ready!	Ready!
echo Steady...	Steady...
move north	win

Note

In each test, the special square is selected in advance and does not change during the contest.