

GameHub Deluxe

GameHub Deluxe is an innovative and comprehensive game collection platform designed to provide an engaging and seamless gaming experience. Built with a focus on object-oriented programming principles, this platform showcases a variety of classic and custom games, including the popular Rock-Paper-Scissors and an original puzzle game called "Hoarders".

Rock-Paper-Scissors Sample Output

```
What would you like to play? 'r' for RockPaperScissors, or 'q' to quit: r
Enter the game options ([num_wins_required]): 1
```

```
Needed to win the match: 1
Your wins: 0
AI's wins: 0
What's your next action [rock (k), paper (p), or scissors (s)]: p
```

```
You chose paper, the AI chose scissors.
You lost the round...
You lost the match...
```

```
Game over: true, Game won: false
So far you have 0 win(s) and 1 loss(es)!
```

```
What would you like to play? 'r' for RockPaperScissors, or 'q' to quit: r
Enter the game options ([num_wins_required]): 11
```

```
Needed to win the match: 11
Your wins: 0
AI's wins: 0
What's your next action [rock (k), paper (p), or scissors (s)]: k
```

```
You chose rock, the AI chose rock.
The round was a draw.
```

```
Needed to win the match: 11
Your wins: 0
AI's wins: 0
What's your next action [rock (k), paper (p), or scissors (s)]: q
Do you want to exit the game (y/n)? y
```

```
Game exited.
What would you like to play? 'r' for RockPaperScissors, or 'q' to quit: r
Enter the game options ([num_wins_required]): -1
Failed to initialize the game: [num_wins_required] must be positive
```

```
What would you like to play? 'r' for RockPaperScissors, or 'q' to quit: x
```

Hoarders

Hoarders is intended to be a single-player puzzle like game where you manage a two-dimensional grid of piles of items to make them "stable". Each item is represented as an integer indicating its weight, and the pile is a list of items ordered from "bottom" to "top". The player is allowed a given number of moves where they can take an item off the top of one pile and place it on top of an adjacent (non-diagonal) pile. The game is won when every pile is stacked from heaviest to lightest items (to keep everything from falling over). In order to make things a little interesting, the player is also allowed a certain number of "special moves", where instead of placing the item on top of the chosen adjacent pile, it gets *put into the middle of the pile above the next largest item from the top*.

Hoarders Sample Output

```
What would you like to play? 'h' for Hoarders, 'r' for Rock-Paper-Scissors,
or 'q' to quit: h
Enter the game options ([board_filepath]): boards/board2.txt
Initializing game board of size 2x3.
1* 1 1
3
You have 1000 move(s) remaining and 10 special move(s).

What's your next action [move (m), super move (s), or peek (p)]: p 1 1

Row 1, Col 1 (bottom to top): 1, 2, 1
1* 1
3
You have 1000 move(s) remaining and 10 special move(s).

What's your next action [move (m), super move (s), or peek (p)]: m 1 1 1 2
2* 1
3
You have 999 move(s) remaining and 10 special move(s).

What's your next action [move (m), super move (s), or peek (p)]: s 1 1 1 2
You've won!
1 1
3
You have 998 move(s) remaining and 9 special move(s).

Game over: true, Game won: true
So far you have 1 win(s) and 0 loss(es)!
What would you like to play? 'h' for Hoarders, 'r' for Rock-Paper-Scissors,
or 'q' to quit: q
```