User Manual: Snake Game

Welcome to the **Snake Game**, a fun, interactive game with single-player and two-players modes. This manual will guide you through the program's goals, instructions, and file management.

Goal of the Program

The goal of the game is to control a snake to:

Eat apples to grow in size and increase your score.

Avoid collisions with walls, yourself, or another snake (in two-player mode).

Compete for the highest score, which is saved and displayed as the Hall of Fame record.

The main goal is to eat as many apples as possible and fill full game board by your snake. For two-player mode is to compete for a higher score or outlast your opponent by avoiding collisions.

Instructions on How to Use the Program

Menu Options

When the game starts, you'll see the main menu:

```
=== Snake Game ===
1. Play Game (1 Player)
2. Play Game (2 Players)
3. Hall of Fame
4. Exit
Choose an option:
```

Option 1: Play Game (1 Player)

Control the snake using the **WASD** keys:

W: Move up

A: Move left

S: Move down

D: Move right

Avoid collisions and collect apples (A) to increase your score.

The game ends when:

- A snake collides with a wall or itself.
- Press Q at any time to quit and return to the menu.

Option 2: Play Game (2 Players)

Two players control separate snakes:

Player 1 uses the WASD keys:

W: Move up

A: Move left

S: Move down

D: Move right

Player 2 uses the IJKL keys:

I: Move up

J: Move left

K: Move down

L: Move right

The game ends when:

- A snake collides with a wall or itself.
- One snake collides with the other.
- Press Q to quit to the menu.

Option 3: Hall of Fame

This section displays the highest score recorded so far.

To return to the main menu press any key.

Option 4: Exit

Closes the game and returns to your terminal.

File Management

Where Files Are Saved and Loaded

The high score is stored in a file called hall_of_fame.txt, located in the program's current working directory.

Saving: When a new high score is achieved, it is written to hall_of_fame.txt.

Loading: The highest score is read from this file whenever the game starts or the "Hall of Fame" menu is accessed.

If hall_of_fame.txt is missing or inaccessible, the game will skip saving/loading the score without errors.

Tips for Enjoying the Game

In single-player mode, focus on precise movements to avoid walls and your own tail.

In two-player mode, use strategic moves to block your opponent or force them into collisions.

Have fun! 🎮