

## JUMPIN

JumpIn is a single player puzzle game in which the goal is to get all the rabbits into a hole by maneuvering them around the board. The game consists of 3 rabbits, 2 foxes, 3 mushrooms and a 5x5 game boards with 5 holes.

**Objective:** The goal of the game is to get all the rabbits into a hole. This is done by moving the rabbits across the board, however rabbits can only move by jumping over other objects such as mushrooms, foxes and other rabbits. The rabbits can jump over multiple pieces at once but cannot jump over empty spaces.

### Pieces:

- **Mushroom:** A stationary obstacle the rabbit can jump over.
- **Fox:** A piece which takes up 2 spaces and can be moved by sliding it depending on its orientation. If it is facing horizontally It can move horizontally and if its veritcally it can move vertically. The orientation of foxes cannot be changed.
- **Rabbit:** A piece which can be moved by jumping over other pieces, and you win the game by getting all the rabbits into a hole

### How to play:

Before you can play the game you must first start up the program which is done as follows:

- Open the terminal
- Navigate to the local path where the JumpIn.jar file is stored
- Type the following line into the terminal

```
java -jar JumpIn.jar
```

After these steps are completed you will be able to play the game.

The game board will start out with an initial puzzle Preloaded in, when first started the board will look like this:

	0	1	2	3	4
0	OH	FT	ES	RA	OH
1	ES	FH	ES	MU	ES
2	ES	ES	OH	ES	RA
3	ES	ES	ES	FT	FH
4	OH	RA	MU	ES	OH

The pieces are explained at the end of the manual in the Legend

You will then be prompted with "What would you like to move. Enter row then column:" which your would then select the row and column of the piece you would like to move, so for example if you wanted to move the Rabbit in the top Row(Located at row 0 column 3) you would input 0 first to select the row then 3 to select the column.

If you have selected a valid piece which can be moved, you will the be prompted to enter the destination you would like to move the piece to by entering the desired ending location. For example you would enter 2 then 3 to move the rabbit to the space below the mushroom.

This will continue on until you win the game by getting all the rabbits into a hole.

**Legend:**

'ES' = Empty Space

'CH' = Filled Hole

'FH' = Fox Head

'FT' = Fox Tail

'MU' = Mushroom

'OH' = Open Hole

'RA' = Rabbit

**Example Game:**

Computer generated

User input

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

```
      0  1  2  3  4
-----
0 |OH FT ES RA OH
1 |ES FH ES MU ES
2 |ES ES OH ES RA
3 |ES ES ES FT FH
4 |OH RA MU ES OH
```

What would you like to move. Enter row then column:

0 3

Where would you like to move it to. Enter row then column:

2 3

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

```
      0  1  2  3  4
-----
0 |OH FT ES ES OH
1 |ES FH ES MU ES
2 |ES ES OH RA RA
3 |ES ES ES FT FH
```

4 |OH RA MU ES OH

What would you like to move. Enter row then column:

2 4

Where would you like to move it to. Enter row then column:

2 2

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

0 1 2 3 4

-----

0 |OH FT ES ES OH

1 |ES FH ES MU ES

2 |ES ES CH RA ES

3 |ES ES ES FT FH

4 |OH RA MU ES OH

What would you like to move. Enter row then column:

2 3

Where would you like to move it to. Enter row then column:

4 3

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

0 1 2 3 4

-----

0 |OH FT ES ES OH

1 |ES FH ES MU ES

2 |ES ES CH ES ES

3 |ES ES ES FT FH

4 |OH RA MU RA OH

What would you like to move. Enter row then column:

4 1

Where would you like to move it to. Enter row then column:

4 4

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

```
      0  1  2  3  4
      -----
0 |OH FT ES ES OH
1 |ES FH ES MU ES
2 |ES ES CH ES ES
3 |ES ES ES FT FH
4 |OH ES MU RA CH
```

What would you like to move. Enter row then column:

1 1

Where would you like to move it to. Enter row then column:

1 4

CH - Filled Hole

OH - Open Hole

MU - Mushroom

ES - Empty Space

RA - Rabbit

FH - Fox Head

FT - Fox Tail

```
      0  1  2  3  4
      -----
0 |OH ES ES ES OH
1 |ES ES ES MU ES
2 |ES ES CH ES ES
3 |ES FT ES FT FH
4 |OH FH MU RA CH
```

What would you like to move. Enter row then column:

4 3

Where would you like to move it to. Enter row then column:

4 0

You win!