Execution

1. When you run the program, you will be asked to enter the settings for the 2 players. You can set any player as a human or an AI. If you set any player as an AI, there are 2 types of AI to be chosen: MiniMax or AlphaBeta. For MiniMax, the level is from 1(easiest) to 8(hardest). For AlphaBeta, the level is from 1(easiest) to 10(hardest).

```
Welcome to Connect Four Game!
Please Choose Player 1 (1- Human, 2- Computer): 2
Please Choose Algorithm (1- MiniMax, 2- AlphaBeta): 1
Please Choose Level (1- Easiest, ... , 8- Hardest): 8
Please Choose Player 2 (1- Human, 2- Computer): 2
Please Choose Algorithm (1- MiniMax, 2- AlphaBeta): 2
Please Choose Level (1- Easiest, ... , 10- Hardest):
```

2. Once you enter all these settings, the grid will be displayed. If any player is human, you will be asked to place piece on his turn. Just select 1 of the columns by entering the column number.

```
Welcome to Connect Four Game!
Please Choose Player 1 (1- Human, 2- Computer): 1
Please Choose Player 2 (1- Human, 2- Computer): 1
 1234567
1.......
2.......
3.......
4.......
5.......
6.......

Player 1 turn:
```

3. Once you enter the column number, the piece will be displayed in the grid. And if it is the AI's turn, it may take some for the AI to think about his choice.

```
Welcome to Connect Four Game!
Please Choose Player 1 (1- Human, 2- Computer): 1
Please Choose Player 2 (1- Human, 2- Computer): 2
Please Choose Algorithm (1- MiniMax, 2- AlphaBeta): 2
Please Choose Level (1- Easiest, ... , 10- Hardest): 10
 1234567
1.......
2.......
3.......
4.......
5.......
6.......

Player 1 turn:
4
 1234567
1.......
2.......
3.......
4.......
5.......
6...X...
```

4. And after some time, it will display piece that AI put.

```
Player 1 turn:
4
 1234567
1.......
2.......
3.......
4.......
5.......
6...X...

 1234567
1.......
2.......
3.......
4.......
5...O...
6...X...

Player 1 turn:
```

5. When a player wins or it goes to a draw game, it will display the information and end.

```
3XXOOXXX
400XXO00
5XXOOXXX
600XXO00

 1234567
100XOX.O
20XXXOXX
3XXOOXXX
400XXO00
5XXOOXXX
600XXO00

 1234567
100XOXOO
20XXXOXX
3XXOOXXX
400XXO00
5XXOOXXX
600XXO00

Draw game!
```

Analysis

In my program, the AI can beat most of the online connect-four games. But there is one interesting thing, the level 8 MiniMax AI will have a draw with the level 10 AlphaBeta, no matter which AI goes first.