

By submitting this assignment, I agree to the following:

"Aggies do not lie, cheat, or steal, or tolerate those who do."

"I have not given or received any unauthorized aid on this assignment."

Names: Jackson Hosea

Matthew Strode

Manisha Subrahmanya

Jennyfer Hoang

Section: 566

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LAB 7A ACTIVITY 1

1. Create a checkers board by making a list of 8 lists.

- I. (.) for empty space
- II. (○) for player 1
- III. (●) for player 2

```
. ○ . ○ . ○ . ○  
○ . ○ . ○ . ○ .  
. ○ . ○ . ○ . ○  
.....  
.....  
● . ● . ● . ● .  
. ● . ● . ● . ●  
● . ● . ● . ● .
```

2. User inputs position of piece they want to move (usermove)

- I. check for correctly formatted input by checking the characters
- II. pieceRow = row of piece
- III. pieceCol = column of piece
- IV. If an 'empty space' in entered position,
 - A. Print an error message
- V. If user enters 'stop'
 - A. Loop breaks, program stops running

3. User inputs the position of the piece they want to move to (usermove).

- I. pieceRow2 = row of piece
- II. pieceCol2 = column of piece

4. Checks if the second position is valid:
 - I. on the board
 - II. empty i.e no piece is present. If true, the piece will move to that position and the board will print. If false, print 'invalid move' and continue to ask for input until a valid input is entered
 - III. diagonal to the first position (diag = True)
5. Perform the switch.
 - I. Replace position 2 with piece located in position 1
 - II. Replace position 1 with 'empty space'.
 - III. Print the new board

```
if (pieceCol+1)%2!=0 and (pieceCol2+1)%2==0 and pieceRow!=pieceRow2 and 0<=pieceCol2<=7:
    diag = True
    board[pieceRow2][pieceCol2] = pieceID
    board[pieceRow][pieceCol] = e
    boardPrint()
elif (pieceCol+1)%2==0 and (pieceCol2+1)%2!=0 and pieceRow!=pieceRow2 and
0<=pieceCol2<=7:
    diag = True
    board[pieceRow2][pieceCol2] = pieceID
    board[pieceRow][pieceCol] = e
    boardPrint()
```

6. Perform this until the user enters 'stop'