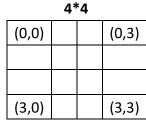
AI Search Project: << Who is fatter>>

Initial input:

- 1. Let player choose to be Player 1 or Player 2 (Player 1 is leading player).
- 2. Set board size: 4*4 or 6*6 squared.
 - a. In 4*4 board, you have a set of chess: [2, 3, 5, 8, 13] which number equal to weight.
 - b. In 6*6 board, you have two set of chess: [2, 3, 5, 8, 13] which number equal to weight, and one more "8". In other word, you have two "2, 3, 5, 13" and three "8".

Ex: (Row, Col) -Top left corner ->(0,0)



6*6

6*6 board:

Player 1: [2, 2, 3, 3, 5, 5, 8, 8, 8, 13, 13]

Player 2: [2, 2, 3, 3, 5, 5, 8, 8, 8, 13, 13]

4*4 board:

Player 1: [2, 3, 5, 8, 13]

Player 2: [2, 3, 5, 8, 13]

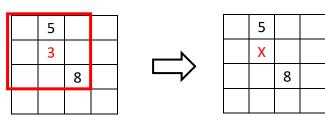
Each round Input:

(Row, Column, Weight) #Weight is which chess you want to put on the board

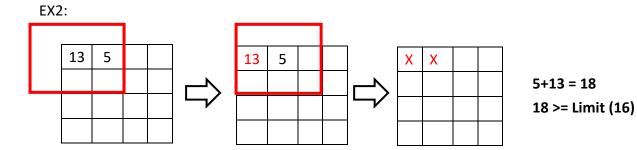
Each round Output:

- 1. Output the simple calculated chessboard. #Note! Calculate every next chess, rules below.
 - a. Weight limit in center of nine-square is 16.
 - b. At the end of each round, each grid must check whether the sum of the numbers in the nine-square grid centered on it exceeds 16 (the upper limit).
 - c. If exceeds upper limit, the center-grid will break. And the chess on the center will "die". And this grid can no longer be placed on other chess.
 - d. If the chess is dead, in the end of the game, you can't get the score represented by this chess.

EX1:



3+5+8 = 16 16 >= Limit (16)



e. The game ends when both players have used up all the chess. Notice, you must put one chess in each round, there is no "pass" here.

f. Your final score is sum of your alive chess on the board.

EX3:

| <u> </u> | | | |
|----------|---|---|---|
| X | X | Х | |
| 2 | Х | 5 | |
| | | 2 | |
| 13 | | | 8 |



Player 1 final score: 2 + 5 + 8 = 15Player 2 final score: 13 + 2 = 15

Following the winning and losing rules below, Player 2 is winner.

• Final Output:

1. When the game is finished, output the winner is Player 1 or Player 2.

Winning and losing rules:

- NP1(x) = Number of x owned by Player 1.
- NP2(x) = Number of x owned by Player 2.

```
If (Score of Player 1 = Score of Player 2)

For CHESS in [13, 8, 5, 3, 2]:

If NP1(CHESS) == NP2(CHESS)

continue

elif NP1(CHESS) > NP2(CHESS)

Output: Winner is P1.

Else

Output: Winner is P2.

elif Score of P1 > Score of P2

Output: Winner is P1.

Else
```

Output: Winner is P2.