Credit Name:CSE 2120 Data Structures 1

Assignment Name: Mastery - Manacala

Error Log Entry

What error message did you encounter (if any)?

What unexpected behavior did your program exhibit?

1. The board format shifted and became off center when there were two digits in the amount of stones in each pit

```
        [10] [10] [10] [10] [10] [10]
   [0]                            [0]
        [10] [10] [10] [10] [10] [10]
```

2. When determining the final stones in each persons pit, the total was wayy to big

```
        [ 7] [ 9] [ 6] [ 6] [ 1] [ 2]
   [1]                            [4]
        [ 0] [ 0] [ 0] [ 0] [ 0] [ 0]
         A    B    C    D    E    F
   Game Over! +

   Player One: 4 Player Two: 85
```

```
   [3] [3] [3] [3] [3] [3]
[0]                      [0]
   [3] [3] [3] [3] [3] [3]
```

What caused the issue? (e.g., syntax error, logic error, incorrect function usage, etc.)

1. Logic error - forgot about double digits   2. Logic error - kept adding the new total each time to 'total'

Include a screenshot of specific lines of code.

1. forgot to screenshot :(but looked exactly like one below without the if and else statments with a single
System.out.print("[" + board [i] + "]"

```java
public static void finalTally(int[] board, int total)
{
    if(isGameOver(board) == true)
    {
        for(int i = 0; i < 6; i++)
        {
            total += board[i];
            board[6] += total;
        }

        for(int i = 7; i < 13; i++)
        {
            total += board[i];
            board[13] += total;
        }
    }
    System.out.print("Player One: " + board[6] + " Player Two: "+ board[13]);
}
```

How did you fix the issue?

1. I added an if statement to change the spacing of each pit depending on the amount of digits (1 or 2)

2. I removed the variable total and directly added it to the home pit

Provide the corrected code or solution using a screenshot.

```java
public static void printBoard(int[] board)
{
    System.out.print("\n    ");
    for (int i = 12; i >= 7; i--)
    {
        if(board[i] >= 10)
        {
            System.out.print("[" + board[i] + "] ");
        }
        else
        {
            System.out.print("[ " + board[i] + "] ");
        }
    }

    System.out.println("\n[" + board[13] + "]                    [" + board[6] + "]");

    System.out.print("    ");
    for (int i = 0; i <= 5; i++)
    {
        if(board[i] >= 10)
        {
            System.out.print("[" + board[i] + "] ");
        }
        else
        {
            System.out.print("[ " + board[i] + "] ");
        }
    }

    System.out.print("\n    ");
    for(int i = 0; i < 6; i++)
    {
```

```java
2  public static void finalTally(int[] board )
   {
       if(isGameOver(board) == true)
       {
           for(int i = 0; i < 6; i++)
           {
               board[6] += board[i];
               board[i] = 0;
           }

           for(int i = 7; i < 13; i++)
           {
               board[13] += board[i];
               board[i] = 0;
           }
       }

       System.out.print("Player One: " + board[6] +
               "\nPlayer Two: "+ board[13]);
   }
```

```java
    {
        System.out.print((char) ('A' + i) + "    ");
    }
}
```

Test case

```
        [ 3] [ 3] [ 3] [ 3] [ 3] [ 3]
[0]                                   [0]
        [ 3] [ 3] [ 3] [ 3] [ 3] [ 3]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): a

        [ 3] [ 3] [ 3] [ 3] [ 3] [ 3]
[0]                                   [0]
        [ 0] [ 4] [ 4] [ 4] [ 3] [ 3]
         A    B    C    D    E    F
Player 2: Choose pit (A - F): b

        [ 4] [ 0] [ 3] [ 3] [ 3] [ 3]
[1]                                   [0]
        [ 1] [ 4] [ 4] [ 4] [ 3] [ 3]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): c
Last stone in home pit! Go Again!
        [ 4] [ 0] [ 3] [ 3] [ 3] [ 3]
[1]                                   [1]
        [ 1] [ 4] [ 0] [ 5] [ 4] [ 4]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): a

        [ 4] [ 0] [ 3] [ 3] [ 3] [ 3]
[1]                                   [1]
        [ 0] [ 5] [ 0] [ 5] [ 4] [ 4]
         A    B    C    D    E    F
Player 2: Choose pit (A - F): f

        [ 4] [ 0] [ 4] [ 4] [ 4] [ 0]
[1]                                   [1]
        [ 0] [ 5] [ 0] [ 5] [ 4] [ 4]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): b
Last stone in home pit! Go Again!
        [ 4] [ 0] [ 4] [ 4] [ 4] [ 0]
[1]                                   [2]
        [ 0] [ 0] [ 1] [ 6] [ 5] [ 5]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): d

..      [ 4] [ 0] [ 4] [ 5] [ 5] [ 1]
  [1]                                 [3]
        [ 0] [ 0] [ 1] [ 0] [ 6] [ 6]
         A    B    C    D    E    F
Player 2: Choose pit (A - F): c

        [ 5] [ 1] [ 0] [ 5] [ 5] [ 1]
[2]                                   [3]
        [ 1] [ 0] [ 1] [ 0] [ 6] [ 6]
```

some more...

```
        [ 2] [ 0] [ 0] [ 2] [ 0] [ 1]
[9]                                   [19]
        [ 0] [ 0] [ 1] [ 1] [ 1] [ 0]
         A    B    C    D    E    F
Player 2: Choose pit (A - F): d

        [ 2] [ 1] [ 1] [ 0] [ 0] [ 1]
[9]                                   [19]
        [ 0] [ 0] [ 1] [ 1] [ 1] [ 0]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): c

        [ 2] [ 1] [ 1] [ 0] [ 0] [ 1]
[9]                                   [19]
        [ 0] [ 0] [ 0] [ 2] [ 1] [ 0]
         A    B    C    D    E    F
Player 2: Choose pit (A - F): b

        [ 3] [ 0] [ 1] [ 0] [ 0] [ 1]
[9]                                   [19]
        [ 0] [ 0] [ 0] [ 2] [ 1] [ 0]
         A    B    C    D    E    F
Player 1: Choose pit (A - F): d
```

```
    [ 3] [ 0] [ 1] [ 0] [ 0] [ 0]
[9]                                    [21]
    [ 0] [ 0] [ 0] [ 0] [ 2] [ 0]
     A    B    C    D    E    F
Player 2: Choose pit (A - F): c

    [ 3] [ 1] [ 0] [ 0] [ 0] [ 0]
[9]                                    [21]
    [ 0] [ 0] [ 0] [ 0] [ 2] [ 0]
     A    B    C    D    E    F
Player 1: Choose pit (A - F): e
Last stone in home pit! Go Again!
    [ 3] [ 1] [ 0] [ 0] [ 0] [ 0]
[9]                                    [22]
    [ 0] [ 0] [ 0] [ 0] [ 0] [ 1]
     A    B    C    D    E    F
Player 1: Choose pit (A - F): f
Last stone in home pit! Go Again!
    [ 3] [ 1] [ 0] [ 0] [ 0] [ 0]
[9]                                    [23]
    [ 0] [ 0] [ 0] [ 0] [ 0] [ 0]
     A    B    C    D    E    F
Game Over!

Player One: 23
Player Two: 13
```