

Assignment 7: The Morra Game Series

Due: October 14, 2021

All programs must run correctly for it to be considered as accepted submission. (Per each missing- or unaccepted-submission your grade will be lowered by one letter grade); The last day to upload the assignments is Dec 20th.

Resources

[https://en.wikipedia.org/wiki/Morra_\(game\)](https://en.wikipedia.org/wiki/Morra_(game))

<https://www.youtube.com/watch?v=HWQDgUYvOOY> (just for fun)

Programming Style related to if statements.

Indentation and Curly Braces for Control Structures (ANSI C++): Pg 3

- Optional Omission of Curly Braces Pg 4
- Indentation of " if " and " else " Pg 5 and Pg 6
- "White Space" (blank line) between Sections / Blocks of Code Pg 7
- "White Space" Before and After Operators, etc. Pg 7
- Return () Statements and the "Single Entry-Single Exit" Rule Pg 8

Objective

In this assignment, you will be practicing for loops and io manipulation in addition to the topics you learned in Assignment 6.

Code : morraSeries.cpp

Input : none

Output : morraSeriesResults.txt

Assignment: The Morra Game Series

You are to write a program that implements **a series of Morra games** between two players. There will be 10 rounds for this series. The person who wins the most of the games will win the series. If both win an equal number of games, it outputs that it is a tie.

Note: there should be NO user inputs.

Formatting: use IO manipulation only when necessary (e.g., to get the table-like output)

The game description is as follows (same as it was in Assignment 6):

Each player simultaneously throws out a single hand with a 0 to five number of fingers and say a guessed sum of all fingers shown by both players. The player who could guess the total correct wins the game. If both players guessed it correctly, it is a tie. If both players could not guess, no one would win. Output the result, similar to the sample output shown below, into a file named *morraSeriesResults.txt*.

- Define and use constants when possible.
- The program should generate different numbers each time it runs;
- Use *if-else if* when possible instead of nested *ifs* or multiple independent *ifs*.

Sample Output

```
1  Game 1:
2  Player |Fingers |Total
3  =====|=====|=====
4  1      |5       |6
5  2      |1       |6
6
7  Correct Total is 6
8  TIE
9  -----
10 Game 2:
11 Player |Fingers |Total
12 =====|=====|=====
13 1      |4       |9
14 2      |3       |5
15
16 Correct Total is 7
17 NO ONE WINS
18 -----
19 Game 3:
20 Player |Fingers |Total
21 =====|=====|=====
22 1      |4       |6
23 2      |4       |8
24
25 Correct Total is 8
26 Player 2 WINS
27 -----
28 Game 4:
29 Player |Fingers |Total
30 =====|=====|=====
31 1      |2       |7
32 2      |5       |6
33
34 Correct Total is 7
35 Player 1 WINS
36 -----
37 Game 5:
38 Player |Fingers |Total
39 =====|=====|=====
40 1      |1       |5
41 2      |4       |6
42
43 Correct Total is 5
44 Player 1 WINS
45 -----
46 Game 6:
47 Player |Fingers |Total
48 =====|=====|=====
49 1      |2       |7
50 2      |2       |4
51
52 Correct Total is 4
53 Player 2 WINS
54
55 =====
56 Summary of the series
57 =====
58 Player 1 won 2 games
59 Player 2 won 2 games
60
61 Winner of the series: It is a TIE
--
```

Things to consider earning the full credits

Your program will be graded on:

1. The program must be submitted by the due date.
2. The program must run correctly and give an output similar to the sample output.
3. You must adhere to the Department style guide.