

Assignment6: The Game Morra

Due: October 7, 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=HWQDqUYvOOY> (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 random numbers, time function, modulus operator, if-else statement(s), and file output.

Code : morra.cpp
Input : none
Output : morraResults.txt

Assignment: Morra

You are to write a program that implements one instant of a Morra game between two players. Each player simultaneously throw out a single hand with a 0 to five number of fingers and say a guessed sum of all fingers showed by both players. The player who could guess the total correct wins. If both players guessed it correctly it is a tie. If both players could not guess, no one wins. output the result, similar to the sample output shown below, into a file, named morraResults.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 Output1

```
morraResult.txt x morra.cpp
1 Fingers total
2 5 6
3 1 6
4 Correct total is 6
5
6 TIE
7
```

Sample Output2

```
morraResult.txt x morra.cpp
1 Fingers total
2 5 5
3 4 9
4 Correct total is 9
5
6 PLAYER 2 WINS
7
```

Sample Output3

```
morraResult.txt x morras.cpp
1 Fingers total
2 5 9
3 4 4
4 Correct total is 9
5
6 PLAYER 1 WINS
7
```

Sample Output4

```
morraResult.txt x morras.cpp
1 Fingers total
2 5 8
3 4 8
4 Correct total is 9
5
6 NO ONE WINS
7
```

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.