

Normo Vs. The Judicial System

Objective:

- Multiple Files
- Default Parameters
- Randomness

Scenario:

The slimes are intensely unhappy with the actions you took to escape their dungeon. Many of those slimes had families, and swapping their souls only added a lot of confusion to their home lives. Not to mention, it was a serious breach of the Slimeva convention, and that fashionable scarf you're wearing made of slime isn't doing you any favors. You have been sent to trial. Unfortunately for you, their verdicts are decided by a "Best 2 out of 3" game of rock paper scissors. Fortunately for you, they almost always pick rock.

Requirements:

Your code must be split into 3 files: a header file, an implementation file, and a main file.

- **Header file:** This file will list all of your function prototypes, all template function code (should you choose to use template functions), as well as all function documentation
- **Implementation file:** This file will contain all of your function definitions.
- **Main file:** This file will contain all of the code contained within your main function.

For this assignment, you will have to implement the following function:

- A "play" function, which invokes a game of rock paper scissors. This function should take 2 string arguments, one

to represent the judges choice, and one that represents Normo's choice. If no parameter is passed as the judges choice, they must default to rock. (That does not mean any value other than paper and scissors are rock, that means no parameter is passed in at all).

- The function should return whether or not Normo won that game of Rock paper scissors. If you need a refresher:
 - The 3 options are rock, paper, and scissors. Paper beats rock. Rock beats Scissors. Scissors beats paper.
- If the match is a draw, it does not count as a win for either player.
- A player must win **twice** in order to win the trial.

Program Flow

- Greet the user
- In a loop, play the game **twice**: The first time, randomly choose whether the judge picks rock, paper, or scissors, and call the **play()** function with that option. The second time, do not pass a parameter to the judges input.
- Each time the **play()** function is called, take input from the user to represent their choice of rock, paper, or scissors.
- When someone has won 2 rounds, exit the loop and display who won.

Submission

- To test your code, run the command `fg++ *.cpp -o fileName` and type `fileName` into the command line to run your executable.

- Submissions must be made through git. If you need a refresher:
 - `git clone` your repository.
 - `cd` into your repository.
 - Write all of your code in your repo.
 - When you're done, `git add`.
 - `git commit -m "Seriously, please don't make this a word for word replica of my example commit message"`
 - `git push`
 - Double check gitlab to make sure your submission went through.
- You will need to submit **at least three** files: Your header.h file, a main.cpp file, and your implementation.cpp file.

Sample output 1

It all comes down to this, Normo.

What do you choose?

scissors

Judge chose: rock

You have lost a round.

What do you choose?

scissors

Judge chose: paper

You have won a round.

What do you choose?

rock

Judge chose: rock

You have tied a round.

What do you choose?

rock

Judge chose: rock

You have tied a round.

What do you choose?

paper

Judge chose: rock

You have won a round.

The verdict came up as innocent. You are scot free, Normo.

Sample output 2

It all comes down to this, Normo.

What do you choose?

scissors

Judge chose: rock

You have lost a round.

What do you choose?

rock

Judge chose: paper

You have lost a round.

The verdict came up as guilty. You have been imprisoned forever.

Notes:

- Use a random seed of 11. Set this seed at the start of your main function.
- You only need to use a file header (name, date, purpose) in your **main** file.
- Remember to `#include` your `.h` file in both your `.cpp` files.
- Don't forget to use `#ifndef`, `#define`, and `#endif` in your `.h` file.
- You may output the results of each game inside the **play** function if you wish.
- You will have to use a default parameter for this assignment. Remember, you cannot place default parameters before non-default parameters!