# Normo(?) vs. His Own Stats

# Objective:

- Constructors
- Operator Overloading

#### Scenario:

Note to self: Think of something creative to put here.

### Requirements:

- You will need to create a class called **GuildMember**. This class should have the following attributes:
- Private member variables:
  - A string for their name
  - An int for their strength
  - An int for their wisdom
  - An int for their dexterity
  - An int for their charisma
  - An int for their intelligence
- Public constructors:
  - A default constructor that sets the name to "Nobody" and their other 5 stats to 0.
  - A parameterized constructor that takes a string, which sets their name equal to the string, and the rest of their stats to 0.
  - A parameterized constructor which takes a string and an array of 5 ints. It should set the name equal to the string, and the strength, wisdom, dexterity, charisma, and intelligence equal to the values in the array (in that order).
- Public operator overloads:

- Overloaded + operator: This operator should be overloaded to add 2 GuildMembers together. It should return a guild member whose name is equal to the 2 names concatenated together (So adding "Bob" and "Byjoe" should result in "BobByjoe"), and each of their 5 stats should be the sum of the corresponding stats of the GuildMembers that were added together.
- Overloaded [] operator: This operator should be overloaded to take an integer as a parameter. If the integer is between 0 and 4, it will return:
  - 0: strength
  - 1: wisdom
  - 2: dexterity
  - 3: charisma
  - 4: intelligence

Passing any other integer into the function should return a 0.

 Overloaded << operator: This operator should be overloaded to output the GuildMember's name, and all 5 of their stats. It should return an oStream object by reference.

### **Program Flow**

- Create a guild member using the default constructor
- Create a guild member passing the name "Kyle" as a parameter.
- Create a guild member, passing the name "Sawson" and an array of ints containing [8,6,7,5,3].
- Create a guild member, passing the name "Pawson" and an array of ints containing [0,9,8,6,7].

- Output all 4 guild members.
- Output the sum of Sawson and Pawson.
- Output Pawson's charisma.

#### **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 "This is a meaningful commit message" git push

Double check gitlab to make sure your submission went through.

# Sample output

Name: Nobody

Strength: 0 Wisdom: 0 Dexterity: 0 Charisma: 0 Intelligence: 0

Name: Kyle Strength: 0 Wisdom: 0 Dexterity: 0 Charisma: 0 Intelligence: 0

Name: Sawson

Strength: 8 Wisdom: 6 Dexterity: 7 Charisma: 5 Intelligence: 3

Name: Pawson

Strength: 0 Wisdom: 9 Dexterity: 8 Charisma: 6 Intelligence: 7

Name: SawsonPawson

Strength: 8 Wisdom: 15 Dexterity: 15 Charisma: 11 Intelligence: 10

6