## Classes and Object Oriented Programming Tasks

**CIT 102** 

## RPG Player

Create a class to represent a player in a simple RPG. The player should have information to keep track of their health, defense and attack strength. The player should be able to attack and take damage. The player should also keep track of whether they're knocked out or not, and change their behavior accordingly.

Test out your player by assigning an instance of your player to a variable and trying out its methods. If you like, you can create enemies to interact with the player as well.

## RPG Player

The RPG Player should have the following state:

- Hp (health)
- Attack\_power
- Defense
- KO (should default to False)

## RPG Player

The RPG Player should have the following behaviors:

- Level\_up increases the player's attack power and defense
- Attack returns an integer attack value: the player's attack power multiplied by either 1 or 2 randomly
- Take\_hit takes an integer amount of damage and reduces the player's hp by that amount minus the player's defense stat.

The player shouldn't be able to attack if their HP is below 0 (if they're KO'ed).