

# Tournament Time

Your goal – to make the best possible character that will **win** battles against other class characters.

Challenge: you don't know what battle types the character will be competing in ahead of time! So you need to be strategic in how you train and not neglect any skills.

However, you are friends with the battle master and she has allowed you to help create the rules for some of the competitions.



VS



# Step 1: Character Creation

Your character can train with up to **100** points, across 10 features:

They also each have a Name, Story, and Special Power, which are strings.

You will define a dictionary containing these features (and give values from 0-100 for each), as well as their name, story, and special power. We will use these dictionaries for the battle.

Please also add 'student' which is your first name in all lowercase letters so we can track submissions.

**your dictionary must be named [you]\_d**

*example:*

strength: 0

stealth: 16

speed: 7

smarts: 24

swimming: 40

shine: 0

scent: 1

sneak: 5.5

smile: 4.5

safety: 2

```
✓ haley_d = {  
    'strength': 0,  
    'stealth': 16,  
    'speed': 7,  
    'smarts': 24,  
    'swimming': 40,  
    'shine': 0,  
    'scent': 1,  
    'sneak': 5.5,  
    'smile': 4.5,  
    'safety': 2,  
    'name': 'blue totoro',  
    'story':  
        'also known as chu totoro and friends with chibi totoro, blue joins us  
        from the camphor tree. their favorite food is acorns and in difficult  
        situations, they get picked up by the catbus and fly away from their  
        opponent',  
    'special_power': 'catbus',  
    'STUDENT': 'haley',  
}
```

# Group Dictionary Practice – Checking if legal players

Let's write a function that all characters will have to go through before entering their arena, which decides if they are trying to sneak in any extra points.

In words, we want to know if the sum of their skill points is **less than or equal to** 100.

We should return True if the player is legal, and False if not. We don't care if the player has less than 100 points – if they didn't train enough, that's their fault!



## Step 2: Battle Preparation

you should now create **three** functions which will be used to battle characters!

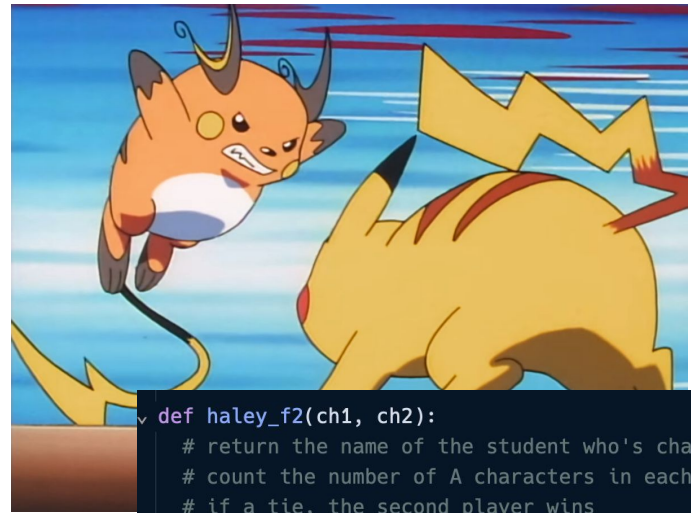
your first two functions should battle **two** characters – the arguments will be two character dictionaries

one function should be a battle royale and take three characters as arguments!

- at least one function should compare numeric properties, and at least one function should compare text properties

**be creative! you don't know what arena you will end up in**

important: functions should be named [you]\_f1, [you]\_f2, and [you]\_f3, and should return the **name** of the **student** with the winning character



```
def haley_f2(ch1, ch2):  
    # return the name of the student who's character wins!!  
    # count the number of A characters in each special power  
    # if a tie, the second player wins  
    As_player1 = 0  
    for letter in ch1['special_power']:  
        if letter == 'a':  
            As_player1 += 1  
        else:  
            As_player1 += 0 # no points for not a  
    As_player2 = 0  
    for letter in ch2['special_power']:  
        if letter == 'a':  
            As_player2 += 1  
        else:  
            As_player2 += 0  
    if As_player1 > As_player2:  
        winner = ch1['STUDENT']  
    else:  
        winner = ch2['STUDENT']  
    return winner
```

# Step 3: Battle!!!

