

## Functions

- printMenu()
  - No args
  - Print main menu
  - Offer user a choice
  - Return userChoice
- printStoredPokemon(<playerID>)
  - <playerID> = name of the player
  - Print out the pokemon selection menu (see lab description)
  - Offer user a choice
  - Return userChoice
- printCurrentPokemon(<playerID>, pokemonName)
  - <playerID> = name of the player
  - pokemonName = name of the pokemon to print
  - Print out the current pokemon menu (see lab description)
  - Offer user a choice
  - Return userChoice
- catchNewPokemon()
  - Play rock paper scissors
  - If win:
    - Print 5 random pokemon
    - userChoice
    - numCandies = random(0,3)
    - If numCand == 0:
      - Candies = 3
    - Elif numCand == 1:
      - Candies = 5
    - Elif numCand == 2:
      - Candies = 10
    - Return userChoice, candies
  - Else:
    - Return False
- levelPokemon(<playerID>, pokemonName)
  - <playerID> = name of the player
  - pokemonName = name of the Pokémon to level
  - Calculate how many levels to add
  - Return pokemon and level
- battle(pMon1, pMon2)
  - pMon1 = dictionary with the necessary info about that pMon
  - pMon2 = same as pMon1 just with pMon2's stats
  - Calculate winning numbers for each:

- $pMonRandomNumber = pMonCP * uniform(10,51) / pMonLevel$
- Whichever pMon has the higher pMonRandomNumber wins
- Returns winner
- calcCP(currentCP, currentLevel)
  - currentCP = pokemons current CP
  - currentLevel = pokemons current level
  - $CP * 0.0094 / (0.095 * \sqrt{Current\ Level})$  for levels 1–30
  - $CP * 0.0045 / (0.095 * \sqrt{Current\ Level})$  for levels 31–40

## Variables

game = {<playerID> = [{pokemonName = [level, cp]}, candies, currentPMon], ...}  
 currentPlayer = {playerID = [stuff, currentPMon]}

## Menus

### MAIN MENU:

- (1) Battle another player
- (2) Catch a new pokemon
- (3) Print your pokemon
- (4) Print currently selected pokemon
- (5) Level currently selected pokemon
- (6) Switch to another player

### Stored Pokemon Menu:

- (1) View current pokemon
- (2) Catch a new pokemon
- (3) Level currently selected pokemon
- (4) Switch to other player

currentPokemon Menu:

Pokemon name:

Current CP:

Current Level:

- (1) - Use Candy to Level - Up
- (2) - Exit to Main Menu

**pokemonSelection Menu:**

Current Pokemon name:

Current CP:

Current Level:

For each pokemon:

print(pokemon name, CP level)

