## Micro Assignment

# Battle

Create a new program that simulates a battle between an avatar and a monster. You can reuse the Avatar class from the Unhappy Ending assignment.

## Pseudo code:

- Setup
  - Create monster.
  - Create avatar.
  - Start battle.
- Battle
  - While both are alive (health above zero).
    - Based on strength, give damage to each other, decreasing health.

## Example output:

```
Battle between Avatar (strength:40,health:100) and Hydra (strength:50,health:50)
Hydra was hit by 22. Hydra health: 28
Avatar was hit by 31. Avatar health: 69
Hydra was hit by 19. Hydra health: 9
Avatar was hit by 33. Avatar health: 36
Hydra was hit by 7. Hydra health: 2
Avatar was hit by 21. Avatar health: 15
Hydra was hit by 17. Hydra health: -15
Avatar was hit by 3. Avatar health: 12
Hydra was killed in battle.
```

Process finished with exit code 0

## UML Class diagram

#### Avatar

- strength : inthealth : int
- + getStrength(): int
- + getHealth(): int
- + Avatar( strength : int, health : int )
- + takeDamage( amount : String )
- + strike(): int
- + isAlive() : boolean+ toString : String

## Monster

- name : Stringstrength : inthealth : int
- + getName() : String + getStrength() : int
- + getHealth(): int
- + Monster( name : String, strength : int, health : int )
- + takeDamage( amount : String )
- + strike(): int
- + isAlive(): boolean + toString: String

#### Battle

+ untilDeath( a : Avatar, m : Monster )