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#warrior and battle class
#warriors will have a name and an energy level and attack and block maximums
#they will have the capability (method) to attack and block random amounts
#Attack random() 0.0 to 1.0 * max attack + 0.5
#Block uses random ()
#each warrior takes a turn toggle style
#Function will have 2 warriors and moves are toggled
#attacks and blocks will be integers
#energy level of 0 or less brings death
```

```
import random
import math
```

```
class Warrior:
    def __init__(self,name ="Warrior",energy_lvl =0, attkMax=0, blockMax=0):
        self.name = name
        self.energy_lvl = energy_lvl
        self.attkMax = attkMax
        self.blockMax = blockMax

    def attack(self):
        attkAmt = self.attkMax * (random.random() + .5)
        return attkAmt

    def block(self):
        blockAmt = self.blockMax * (random.random() + .5)
        return blockAmt
```

```
class Battle:
    #utility class
```

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def startFight(self,warrior1,warrior2):
    while True:
        if self.getAttackResult(warrior1,warrior2) == "Game Over" :
            print("Game Over!")
            break
        if self.getAttackResult(warrior2,warrior1) == "Game Over" :
            print("Game Over!")
            break

    @staticmethod
    def getAttackResult(warriorA,warriorB):
        warriorAAttkAmt = warriorA.attack()
        warriorBBlockAmt = warriorB.block()
        damage2WarriorB = math.ceil(warriorAAttkAmt-warriorBBlockAmt)
        warriorB.energy_lvl = warriorB.energy_lvl - damage2WarriorB
        print("{} attacks {} and deals {} damage".format(warriorA.name,warriorB.name,damage2WarriorB))
        print("{} is down to energy level {}".format(warriorB.name,warriorB.energy_lvl))
        if warriorB.energy_lvl<= 0:
            print("{} has died and {} is the winner\nGame Over!".format(warriorB.name,warriorA.name))
            return "Game Over"
        else:
            "The Battle Continues..."

def main():
    maximus = Warrior("Maximus",50,20,10)
    galaxon = Warrior("Galaxon",50,20,10)
    battle = Battle()

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```
battle.startFight(maximus,galaxon)
```

```
main()
```

```
##### GAME PLAYED #####
```

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Maximus attacks Galaxon and deals 21 damage

Galaxon is down to energy level 29

Galaxon attacks Maximus and deals 13 damage

Maximus is down to energy level 37

Maximus attacks Galaxon and deals 1 damage

Galaxon is down to energy level 28

Galaxon attacks Maximus and deals 5 damage

Maximus is down to energy level 32

Maximus attacks Galaxon and deals 11 damage

Galaxon is down to energy level 17

Galaxon attacks Maximus and deals 19 damage

Maximus is down to energy level 13

Maximus attacks Galaxon and deals 0 damage

Galaxon is down to energy level 17

Galaxon attacks Maximus and deals 12 damage

Maximus is down to energy level 1

Maximus attacks Galaxon and deals 9 damage

Galaxon is down to energy level 8

Galaxon attacks Maximus and deals 2 damage

Maximus is down to energy level -1

Maximus has died and Galaxon is the winner

Game Over!