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class SimpleFSM:
    def Thinking(self):
        #local variables
        fatigue = 0
        hunger = 0
        thirst = 0

        states = ["eating", "drinking", "sleeping", "awake"]
        currentState = "awake"

        alive = True
        running = True
        maxLimit = 100
        gameTime = 0

        while running and alive:
            gameTime += 1

            #sleeping: reduce fatigue, everything else increases
            if currentState is "sleeping":
                #sleep
                print("Zzzzzzzzzzz")
                fatigue -= 1
                hunger += 0.5
                thirst += 0.5

            #check if not tired
            if fatigue < 5:
                #check for other states
                if thirst > 7:
                    currentState = "drinking"
                elif hunger > 7:
                    currentState = "eating"
                else:
                    currentState = "awake"

            #awake: doing nothing, all variables increase
            elif currentState is "awake":
                #do nothing
                print("Bored . . .")
                hunger += 1
                thirst += 1
                fatigue += 1

            #check for other states
            if fatigue > 15:
                currentState = "sleeping"
            elif thirst > 7:

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        currentState = "drinking"
    elif hunger > 7:
        currentState = "eating"

#eating: hunger reduces, fatigue and thirst increase
elif currentState is "eating":
    #eat
    print("Om nom nom nom")
    hunger -= 2
    thirst += 1
    fatigue += 0.5

#check for other states
if fatigue > 15:
    currentState = "sleeping"
elif thirst > 7:
    currentState = "drinking"
elif hunger < 2:
    currentState = "awake"

#drinking: thirst reduces, all other states increase
elif currentState is "drinking":
    #drink
    print("Gulp gulp gulp")
    thirst -= 2
    hunger += 1
    fatigue += 0.5

#check for other states
if fatigue > 15:
    currentState = "sleeping"
elif thirst < 2:
    if hunger > 7:
        currentState = "eating"
    else:
        currentState = "awake"

else:
    #broken
    print("Why are you here? The code must have something wrong with it . . .")
    die()

#checking if starved to death
if hunger > 20:
    alive = False
    print("Gurgle . . . Gurgle . . . *death rattle*")

elif thirst > 20:

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alive = False
print("*gasp* . . . *gasp* . . . *death rattle*")
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elif fatigue > 20:
    alive = False
    print("*thud* . . . *death rattle*")
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#checking for end of game time
if gameTime > maxLimit:
    running = False
    print("*siren goes off*")
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print("Hello world!")
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ai = SimpleFSM()
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ai.Thinking()
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print("--- The End ---")
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