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from gpiozero import LightSensor
import time
import math

def moyenne(valeurs):
    if(sum(valeurs)<0):
        return 0
    else:
        return sum(valeurs) / len(valeurs)
donnees = open("nbrP.txt", "w")
moyennes = open("hour.txt", "w")
i,nbrP = 0,0
personne=[]
moy=0
tableString=[]
capteur1 = LightSensor(18, 3.3, 0.07234, 0.01)
capteur2 = LightSensor(24, 3.3, 0.07234, 0.01)
while(True):

    if(time.strftime('%A') == "Sunday"):
        debut = 10
        fin = 17
    if(time.strftime('%A') == "Saturday"):
        while(time.strftime('%A') == "Saturday"):
            time.sleep(1)
    else:
        debut = 10
        fin = 25#18


    while (debut < int(time.strftime('%H')) < fin):
        if(nbrP<0):
            nbrP = 0
        donnees = open("nbrP.txt", "a")
        moyennes = open("hour.txt", "a")
        now = time.time()

        personne=[]
        tableString=[]
        while(math.floor(time.time()-now) <= 120): #3600 = vraie, 120 = test

            while(math.floor(time.time()-now) <= 60): #300= vraie, 60 = test
                if capteur1.value != 0.0:
                    while(capteur1.value != 0.0):
                        if capteur2.value != 0.0:
                            nbrP = nbrP + 1
                            print("+1")
                            time.sleep(0.5)
                elif capteur2.value != 0.0:
                    while(capteur2.value != 0.0):
                        if capteur1.value != 0.0:
                            nbrP = nbrP - 1
                            print("-1")
                            time.sleep(0.5)
                personne.append(nbrP)
                tableString.append(str(time.strftime("%Y-%d-%m;%H:%M;")) +
str(personne[i]))
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                if(math.floor(time.time()-now) == 60):#300= vraie, 60 = test
                    #tableString.reverse()
                    donnees.write("\n"+tableString[len(tableString)-1])
                    time.sleep(1)
                    #for k in range(len(tableString)):
                     #   donnees.write(tableString[k])

            if(math.floor(time.time()-now) == 120):#3600 = vraie, 120 = test
                moy = moyenne(personne)
                moyennes.write("\n" + str(time.strftime("%Y-%d-%m;%H:%M;")) +
str(moy))
                time.sleep(1)
        donnees.close()
        moyennes.close()
```