

### ATIVIDADE CONTEXTUALIZADA 8

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import csv
def ler():
    with
open('C:\\Users\\eduar\\OneDrive\\Documentos\\GitHub\\ProgISD20202-1\\M
aria_Eduarda\\aula8\\coletaFlexJoelho.csv','r') as fileObject:
    lista=[]
    for line in fileObject:
        dadosEsp=line.split(',')
        esp2=dadosEsp[1].split('"')[0]
        #print(esp2)
        esp1=dadosEsp[0].split('"')[1]
        #print(esp1)
        for dadosEsp1 in esp1.split(","):
            #print(float(dadosEsp1))
            lista.append(float(dadosEsp1))
        for dadosEsp2 in esp2.split(","):
            #print(float(dadosEsp2))
            lista.append(float(dadosEsp2))
    return lista
def calculoDoAngulo():
    coleta=ler()
    ang=0
    angulos=[]
    #conferencia=[]
    for i in range (4,len(coleta),4):
        #conferencia.append(coleta[i])
        ang=0.98*(ang+coleta[i]*0.05)+(1-0.98)*coleta[i-3]
        angulos.append(ang)
    return angulos
def salvando ():
    coleta=calculoDoAngulo()
    sensor1=[]
    sensor2=[]
    for i in range(0,len(coleta),1):
        if ((i%2)==0):
            sensor1.append(coleta[i])
        else:
            sensor2.append(coleta[i])
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with open('anguloprocessado.csv', 'w', newline='') as csvfile:
    spamwriter = csv.writer(csvfile, delimiter=' ',
                             quotechar='|', quoting=csv.QUOTE_MINIMAL)

    spamwriter.writerow(['Valores dos Angulos'] )
    spamwriter.writerow(['Sensor 1: \n'] + [sensor1])
    spamwriter.writerow(['Sensor 2: \n']+ [sensor2])
with open('anguloprocessado.csv','r',newline='') as csvfile:
    spamreader = csv.reader(csvfile,delimiter=' ',quotechar='|')
    for row in spamreader:
        print(','.join(row))
with open('anguloprocessado.txt','w') as FileObject:
    FileObject.write("***Valores dos Angulos***\n#Sensor 1:\n")
    FileObject.writelines(str(sensor1))
    FileObject.write("\n\n#Sensor 2:\n")
    FileObject.writelines(str(sensor2))
with open('anguloprocessado.txt','r') as FileObject:
    print(FileObject.read())

print("****Welcome CalcAngle****")
salvando()

```