

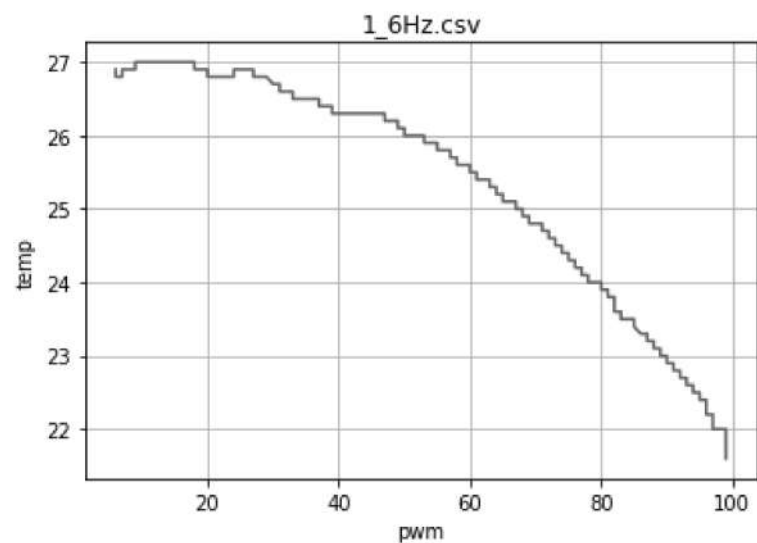
```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

path = '../dados'
for diretorio, subpastas, arquivos in os.walk(path):
    for arquivo in arquivos:
        bd = pd.read_csv(os.path.join(diretorio, arquivo), delimiter=';')
        temp = np.array(bd['temp'].values)
        pwm = np.array(bd['pwm'].values)
        for i in range (len(temp)):
            if(temp[i]<(temp[0]-0.5)):
                pwm_min = pwm[i]
                temp_max = temp[i]
                break
        temp_min = min(temp)
        pwm_max = pwm[np.where(temp == temp_min)[0][0]]
        plt.plot(pwm, temp)
        plt.title(arquivo)
        plt.xlabel('pwm')
        plt.ylabel('temp')
        plt.text(pwm[0], temp[0]+2,'Pwm: de {} até {} \nrange: {} \ndeltaT: {}'.format(pwm_min,pwm_max,pwm_max-pwm_min,round(
        plt.grid(True)
        plt.show()
```



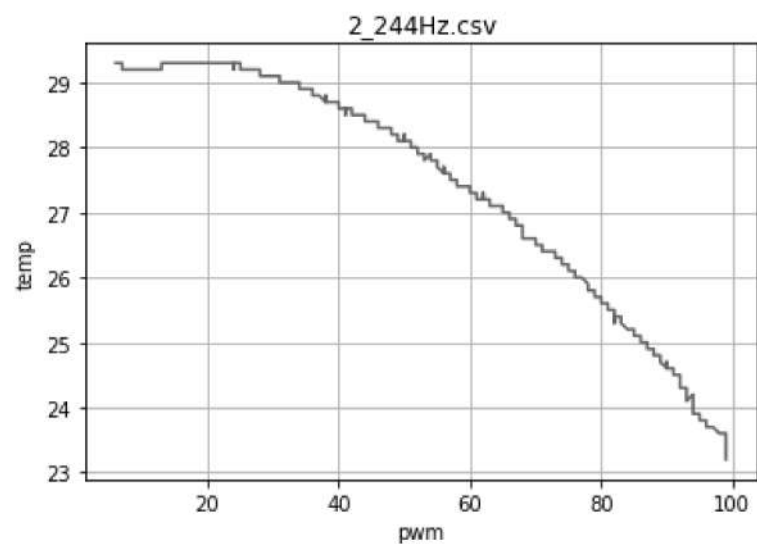
26.4

Pwm: de 39 até 99  
range: 60  
deltaT: 4.7



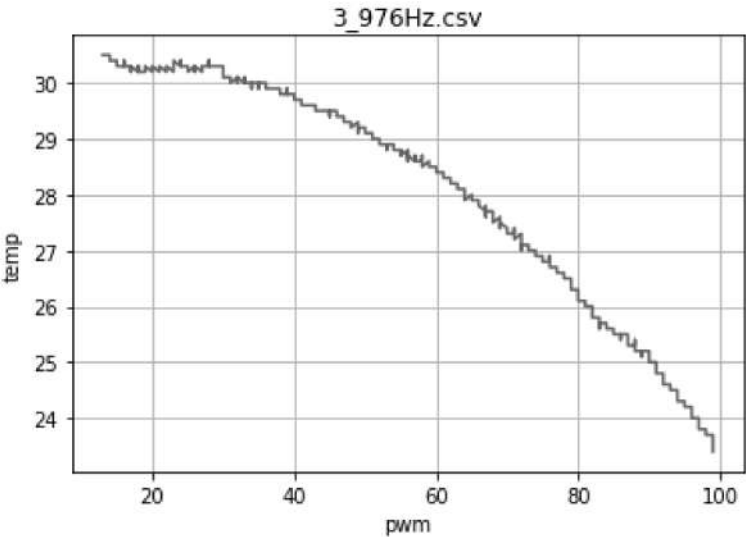
28.8

Pwm: de 38 até 99  
range: 61  
deltaT: 5.5



30.0

Pwm: de 34 até 99  
range: 65  
deltaT: 6.5



25.4

Pwm: de 41 até 99  
range: 58  
deltaT: 4.2

