LAB Logbook

Lab 1:

Code:

import numpy as np

sid\_last\_two = 75

if sid\_last\_two < 10:

num\_elements = sid\_last\_two + 100

else:

num\_elements = sid\_last\_two

a = np.arange(num\_elements)

print("Original array:", a)

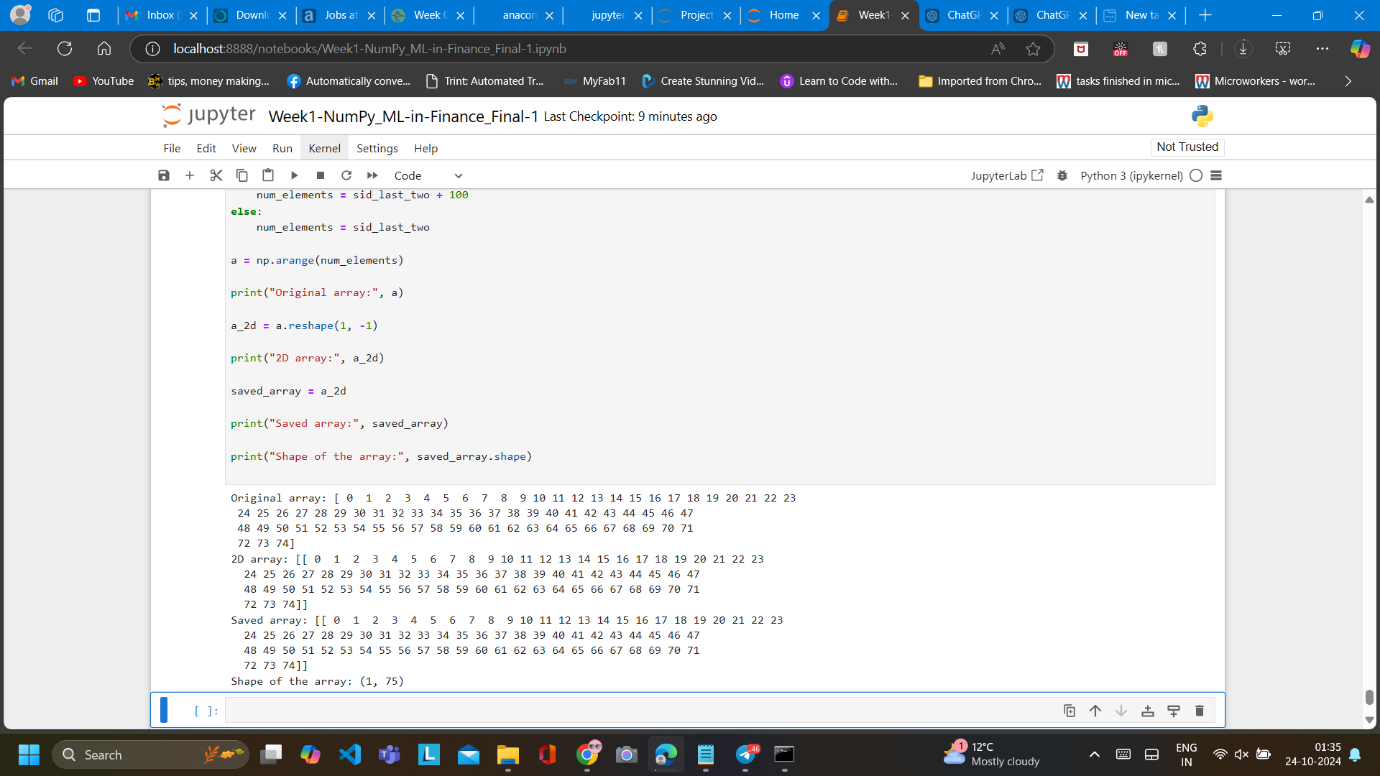
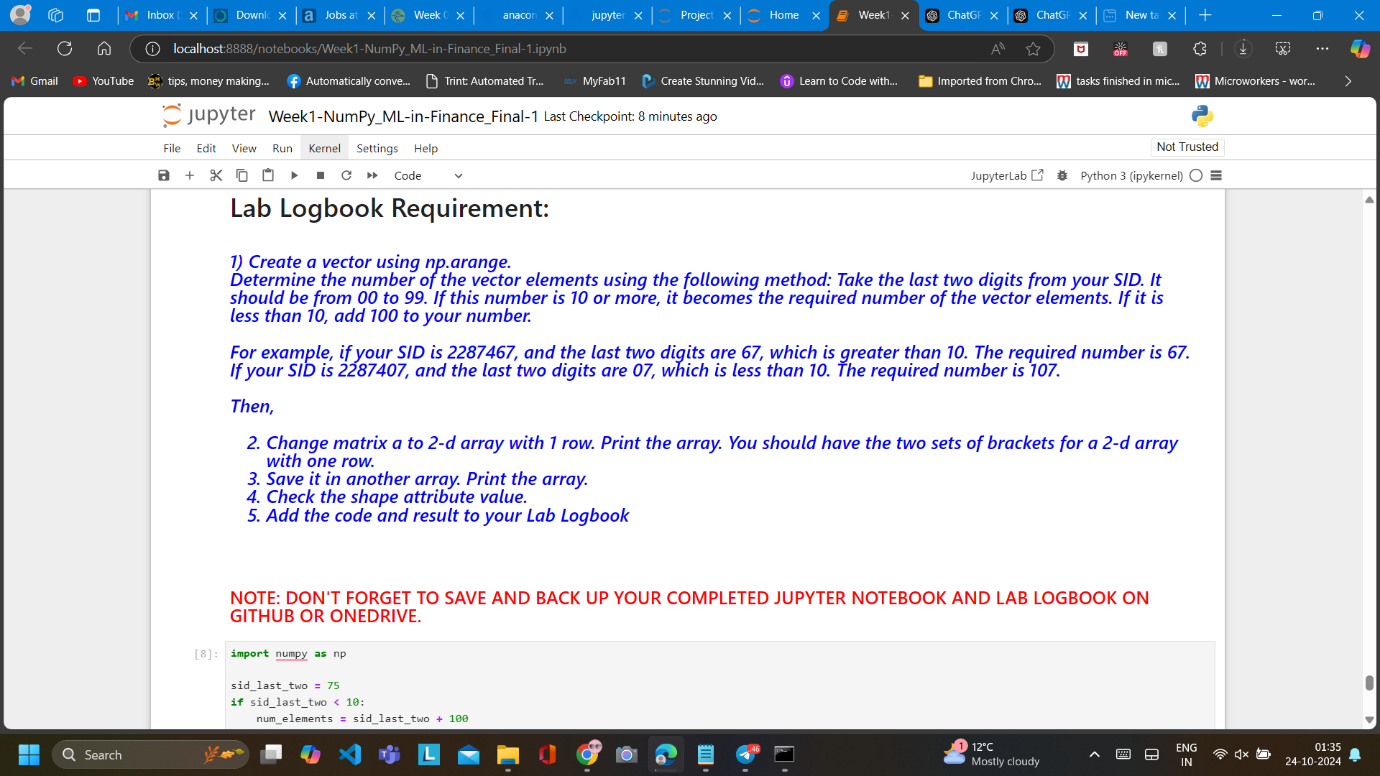
a\_2d = a.reshape(1, -1)

print("2D array:", a\_2d)

saved\_array = a\_2d

print("Saved array:", saved\_array)

print("Shape of the array:", saved\_array.shape)



Lab 2

Code :

import pandas as pd

df = pd.read\_csv('adult\_data\_mini.csv')

print("Original DataFrame:")

#print(df)

#n as the last digit of my SID 2331175

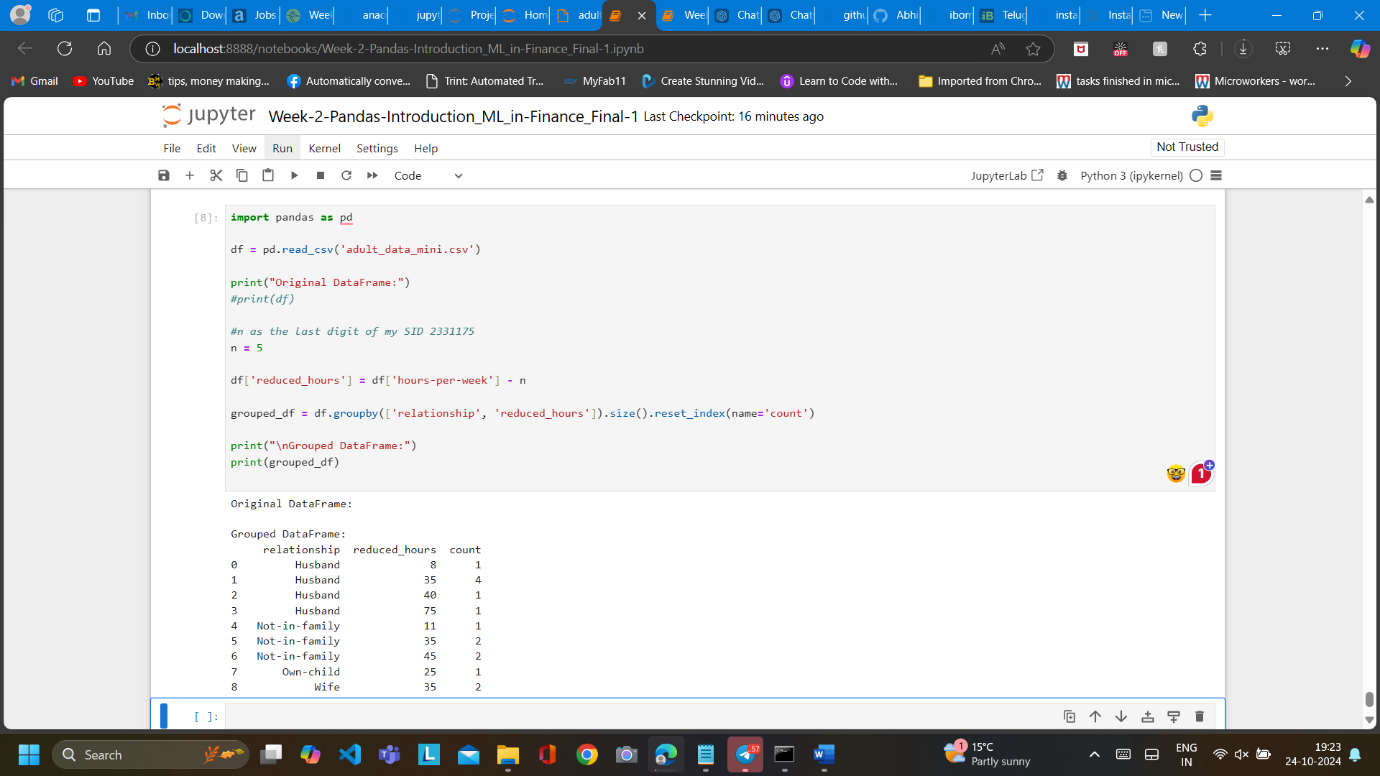
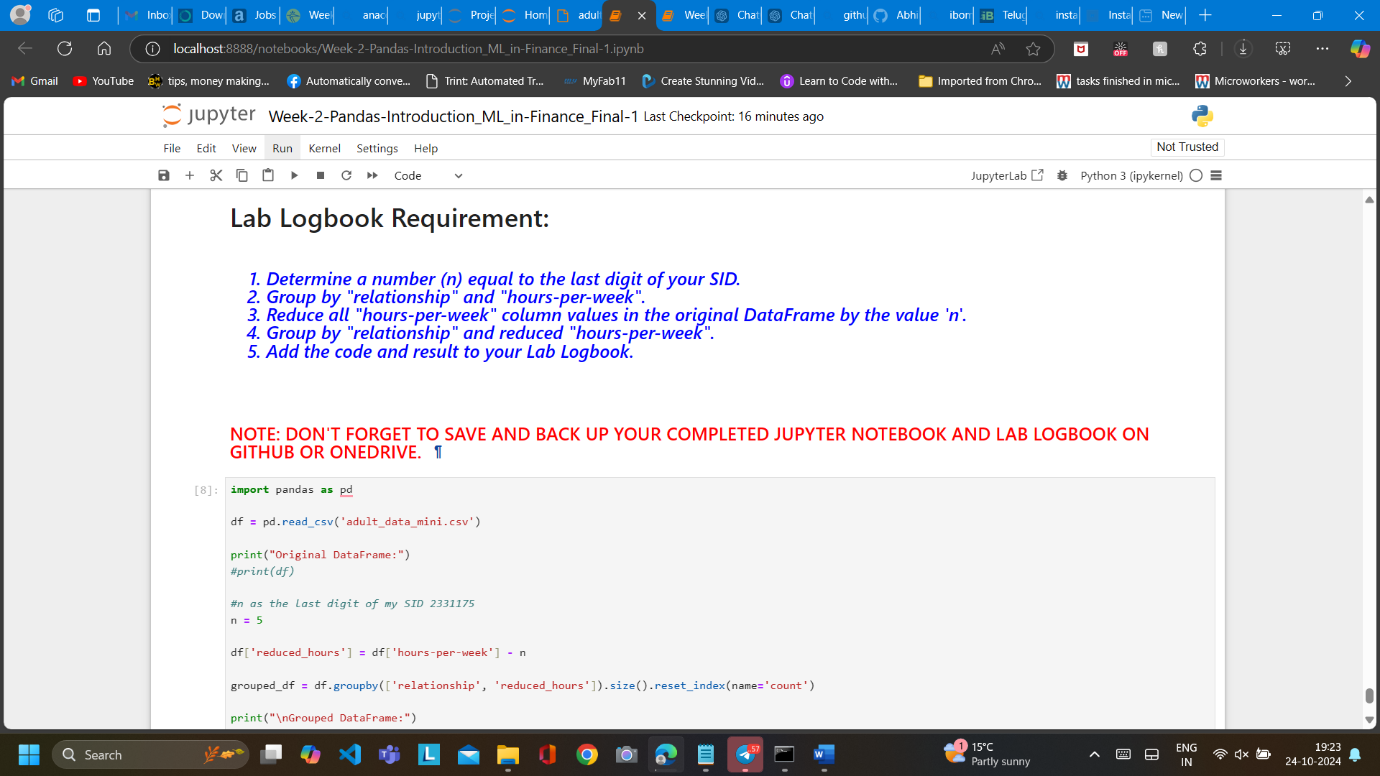
n = 5

df['reduced\_hours'] = df['hours-per-week'] - n

grouped\_df = df.groupby(['relationship', 'reduced\_hours']).size().reset\_index(name='count')

print("\nGrouped DataFrame:")

print(grouped\_df)



Lab 3

Lab 4

Lab 5

Lab 6

Lab 7

Lab 8

Lab 9

Lab 10

Lab 11

Lab 12