import pandas as pd

#If the file is the main file

if \_\_name\_\_ == "\_\_main\_\_":

#creating the person dictionary

persondict = {'person':['Bob','Alice','Steve'],

'age':[32, 24, 64], 'weight':[128, 86, 95]}

#Converting teh dictionary into the DataFrame

df = pd.DataFrame(persondict, columns = ["person", "age", "weight"])

#Setting the index for the data frame to person

df = df.set\_index("person")

#Printing the data frame

print("Data frame:")

print(df,"\n")

#Stacking the data frame

result = df.stack()

#Getting rid of the indexes

dfStacked = result.reset\_index()

#Naming the columns

dfStacked.columns = ["person", "attribute", "value"]

#Printing the stacked columns with the named columns

print("Stacked data frame:")

print(dfStacked,"\n")

#Unstacking the stacked data frame

dfUnstacked = result.unstack()

#Resetting the index

dfUnstacked = dfUnstacked.reset\_index()

#Printing the unstacked data frame

print("Unstacked data frame")

print(dfUnstacked,"\n")

#Pivoting the stacked data frame

dfPivot = dfStacked.pivot("person", "attribute", "value")

#Printing the pivot table

print("Pivot data frame: ")

print(dfPivot, "\n")

