import numpy as np

data=data.loc[(data['total\_bill'] >0) & (data['total\_bill'] <9999)]

print(data)

data['sex'].replace('Lady','Female',inplace=True)

data['sex'].replace('Man','Male',inplace=True)

data['day'].replace('Thursday','Thur',inplace=True)

print(data)

tip=data['tip']

print('total amount of tips given is :',np.sum(tip))

groupmax=np.max(data['size'])

largestgroup=data.loc[(data['size'] ==groupmax)]

print('largest group is :')

print(largestgroup)

datamales=data.loc[(data['sex'] =='Male')]

billsmales=np.sum(datamales['total\_bill'])

datafemales=data.loc[(data['sex'] =='Female')]

billsfemales=np.sum(datafemales['total\_bill'])

print('bills paid by males is :',billsmales)

print('bills paid by females is :',billsfemales)

tipmax=np.max(data['tip'])

print('largest tip is :',tipmax)

Sun=data.loc[(data['day'] =='Sun')]

Suntips=np.sum(Sun['tip'])

Sat=data.loc[(data['day'] =='Sat')]

Sattips=np.sum(Sat['tip'])

Thur=data.loc[(data['day'] =='Thur')]

Thurtips=np.sum(Thur['tip'])

Fri=data.loc[(data['day'] =='Fri')]

Fritips=np.sum(Fri['tip'])

week=['Sunday':Suntips,'Saturday':Sattips,'Thursday':Thurtips,'Friday':Fritips]

for i in week:

if i>i+1:

day=i

else:

day=i+1

day=week.loc[week[day]]

print('The day largest tip given on is :',day)