import pandas as pd

from sklearn.linear\_model import LinearRegression

from sklearn.svm import SVC

def reg(file,impacts,outcome,inps):

data = pd.read\_csv(file)

X = data[impacts]

Y = data[outcome]

linear\_regressor = LinearRegression()

linear\_regressor.fit(X, Y)

nx = [inps]

pred = linear\_regressor.predict(nx)

return pred

def classify(file,impacts,outcome,inps):

data = pd.read\_csv(file)

X = data[impacts]

Y = data[outcome]

Y = Y.round()

clf = SVC(kernel='linear')

clf.fit(X, Y)

nx = [inps]

pred = clf.predict(nx)

return pred

msg=input("""bot:how can i help you:?

you:""")

if "predict" in msg:

x=input("""bot:do u want to do prediction?

you:""")

if "yes" in x:

year = int(input("""bot:could u plz Enter year?

You:"""))

quarter = int(input("""bot:could you plz Enter quarter?

you:"""))

types = int(input("""bot:could you plz Enter type value?

you:"""))

ps = int(input("""bot:could you plz Enter previous sale?

you:"""))

cost = int(input("""bot:could you plz Enter cost?

you:"""))

battery = int(input("""bot:could you plz Enter battery?

you:"""))

aoos = int(input("""bot:could you plz Enter online availability?

you:"""))

noo = int(input("""bot:could you plz Enter no. of outlets?

you:"""))

noc = int(input("""bot:could you plz enter no of competitors?

you:"""))

y=input("""bot: select an algorithm regression or classification?

you:""")

if "regression" in y:

s = reg('SalesPrediction.csv',["year","quarter","types","ps","cost","battery","aoos","noo","noc"],"sales",[year,quarter,types,ps,cost,battery,aoos,noo,noc])

print("The value of sales: ",float(s[0]))

if "classification" in y:

s = reg('SalesPrediction.csv',["year","quarter","types","ps","cost","battery","aoos","noo","noc"],"sales",[year,quarter,types,ps,cost,battery,aoos,noo,noc])

print("The value of sales: ",float(s[0]))

s = classify('SalesPrediction.csv',["year","quarter","types","ps","cost","battery","aoos","noo","noc"],"sc",[year,quarter,types,ps,cost,battery,aoos,noo,noc])

print("classification:",float(s[0]))

if "no" in x:

print("bot:thank you have a nice day")

else:

print("sorry its not available!!")