**Q1:**

cars=["mercedes","wolkswagen","bmw"]

mercedes=[ ["A180","2019",[4,120]] ]

bmw=[ ["3.18","2018",[9,140]] , ["5.20","2017",[3,210]] ]

wolkswagen=[ ["Passat","2014",[3,120]] ]

print("Welcome to our Car Rental Firm")

print("Our Car Brands: ",cars)

true\_value=0

def cost\_of\_rent(car\_brand,car\_model,rent\_days):

if car\_model==car\_brand[0][0]:

return car\_brand[0][2][1]\*rent\_days

elif car\_model==car\_brand[1][0]:

return car\_brand[1][2][1]\*rent\_days

def rent(brand):

model=input("Which model do you want: ")

day=int(input("How mand days do you rent this car: "))

print("Cost of rent: ",cost\_of\_rent(brand,model,day))

while true\_value==0:

brand=input("Enter your selection: ")

if brand=="mercedes":

true\_value=1

print("Model:{} Year:{}".format(mercedes[0][0],mercedes[0][1]))

rent(mercedes)

elif brand=="wolkswagen":

true\_value=1

print("Model:{} Year:{}".format(wolkswagen[0][0],wolkswagen[0][1]))

rent(wolkswagen)

elif brand=="bmw":

true\_value=1

for i in range(2):

print("Model:{} Year:{}".format(bmw[i][0],bmw[i][1]))

rent(bmw)

elif brand=="exit":

true\_value=1

print("")

else:

print("Please enter valid value")

**Q2:**

upper=[]

lower=[]

classes=["MATH 150","PSYCH 111","PSYCH 313","PSYCH 412","MATH 300","MATH 404","MATH 206","ENG 100","ENG 103","ENG 201","PSYCH 508","ENG 220","ENG 125","ENG 124"]

classes.sort()

for i in range(6):

if classes[i]>="ENG 200":

upper.append(classes[i])

else:

lower.append(classes[i])

for i in range(6,10):

if classes[i]>="MATH 300":

upper.append(classes[i])

else:

lower.append(classes[i])

for i in range(10,14):

if classes[i]>="PSYCH 400":

upper.append(classes[i])

else:

lower.append(classes[i])

print(upper,lower)