myinput = ''' 1 imported bottle of perfume at 27.99 1 bottle of perfume at 18.99

1 packet of headache pills at 9.75

1 box of imported chocolates at 11.25 '''

tax\_exemption\_list = ['food','books','medical']

category = {'book' : 'books', 'music CD' : 'Entertainment', 'chocolate bar' : 'food', 'imported box of chocolates':'food','bottle of perfume':'Accessory','imported bottle of perfume':'Accessory','packet of headache pills':'medical','box of imported chocolates':'food'}

#creating the desired dictionary:-----------------------------------------------

bill\_list={}

cleaned = myinput.strip().split('\n')

for i in cleaned:

if i == ' ' or i=='':

position = cleaned.index(i)

cleaned.remove(i)

for i in cleaned:

mylist = i.split(',')

for j in mylist:

newlist = j.strip().split(' ')

if newlist.count('at')>1:

pos = newlist.index('at')

list1 = newlist[:pos+2]

list2 = newlist[pos+2:]

quantity1= int(list1[0])

price1 = float(list1[len(list1)-1])

item1 = ' '.join(list1[1:len(list1)-2])

bill\_list[item1] = {"quantity":quantity1, "price": price1}

quantity2 = int(list2[0])

price2 = float(list2[len(list2)-1])

item2 = ' '.join(list2[1:len(list2)-2])

bill\_list[item2] = {"quantity":quantity2, "price":price2}

else:

quantityn = int(newlist[0])

pricen = float(newlist[len(newlist)-1])

itemn = ' '.join(newlist[1:len(newlist)-2])

bill\_list[itemn] = {"quantity":quantityn, "price":pricen}

print(bill\_list)

#Printing the output-------------------------------

old\_total = 0

for old\_product in bill\_list:

old\_total = bill\_list[old\_product]['price'] + old\_total

print(old\_total)

for product in bill\_list:

if (category[product] in tax\_exemption\_list) and ('imported' in product):

bill\_list[product]['price'] = (((bill\_list[product]['price'])\*(.05)) + bill\_list[product]['price'])

elif (category[product] in tax\_exemption\_list) and ('imported' not in product):

bill\_list[product]['price'] = bill\_list[product]['price']

elif (category[product] not in tax\_exemption\_list) and ('imported' not in product):

bill\_list[product]['price'] = ((bill\_list[product]['price'])\*(.10)) + bill\_list[product]['price']

elif (category[product] not in tax\_exemption\_list) and ('imported' in product):

bill\_list[product]['price'] = ((bill\_list[product]['price'])\*(.10)) + ((bill\_list[product]['price'])\*(.05)) + bill\_list[product]['price']

else:

bill\_list[product]['price'] = 0

print(bill\_list)

new\_total = 0

for new\_product in bill\_list:

new\_total = bill\_list[new\_product]['price'] + new\_total

print(new\_total)

for output in bill\_list:

print(bill\_list[output]['quantity']," ",output,": ",bill\_list[output]['price'])

print("Sales Tax: ", round(new\_total-old\_total,2))

print("TotaL: ",new\_total)