def checkType(INPUT, TYPE):

try:

INPUT = type(TYPE)(INPUT)

return True

except:

return False

def NumInput(context):

while True:

enter = input(context)

if (enter == "exit"):

exit(0)

if (enter == "help"):

continue

if (checkType(enter, 0)):

enter = int(enter)

return enter

print("Invalid!")

continue

def TextInput(context):

while True:

enter = input(context)

if (enter == "exit"):

exit(0)

if (checkType(enter, " ")):

enter = str(enter)

return enter

print("Invalid!")

continue

def RangeNumberInput(context, range1, range2):

while True:

enter = NumInput(context)

if (enter >= range1):

if (enter <= range2):

return enter

else:

print("out of bound")

continue

else:

print("out of bound")

continue

def TaskOne():

#initialize variables for "Amount"

CitizenAmount = 0

CarerAmount = 0

TotalAmount = 0

#initialize variables for "cost"

CoachCost = 0

MealCost = 0.00

TicketCost = 0.00

TotalCost = 0.00

PersonCost = 0.00

CitizenAmount = RangeNumberInput("Please Enter the number of the citizens:", 10, 36)

CarerAmount = 2

change the amount of carer to 3

if(CitizenAmount > 24):

CarerAmount = CarerAmount + 1

TotalAmount = CitizenAmount + CarerAmount

if(12 <= TotalAmount <= 16):

CoachCost = 150

MealCost = 14.00 \* CitizenAmount

TicketCost = 21.00 \* CitizenAmount

elif(17 <= TotalAmount <= 26):

CoachCost = 190

MealCost = 13.50 \* CitizenAmount

TicketCost = 20.00 \* CitizenAmount

elif(27 <= TotalAmount <= 39):

CoachCost = 225

MealCost = 13.00 \* CitizenAmount

TicketCost = 19.00 \* CitizenAmount

else:

pass

TotalCost = CoachCost + MealCost + TicketCost

PersonCost = TotalCost / CitizenAmount

ReturnData = [TotalCost, PersonCost, CitizenAmount, CarerAmount]

return ReturnData

def TaskTwo(DataOne):

DataOne[3] = the total amount of people)

NameList = ["" for i in range (0, DataOne[2] + DataOne[3])]

MoneyList = [0 for i in range (0, DataOne[2] + DataOne[3])]

TotalMoney = 0.00

for i in range (0, len(NameList)):

print("\npeople",i + 1,":")

if(i < DataOne[3]):

NameList[i] = TextInput("Enter carer's name:")

else:

NameList[i] = TextInput("Enter citizen's name:")

MoneyList[i] = RangeNumberInput("Enter the amount of money this person paid:",0,100000000)

for i in range (0, DataOne[3]):

MoneyList[i] = 0

print("\n-------------------------------")

print(" identity name ")

print("-------------------------------")

for i in range (0, len(NameList)):

if(i < DataOne[3]):

print(" Carer ", NameList[i])

else:

print(" citizen ", NameList[i])

print("-------------------------------")

for i in MoneyList:

TotalMoney = TotalMoney + i

return TotalMoney

def TaskThree(DataOne,DataTwo):

if(DataOne[0] > DataTwo):

print("the outing has broken with a \"profit\" of", DataTwo - DataOne[0])

elif (DataOne[0] < DataTwo):

print("the outing has made a profit of", DataTwo - DataOne[0])

else:

print("the profit is zero but didn't break")

return 0

DataOne = TaskOne()

print(DataOne[0])

DataTwo = TaskTwo(DataOne)

DataThree = TaskThree(DataOne,DataTwo)