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CSC\_242\_Lab\_013

**SOURCE CODE:**

**(commissions.py)**

*from* tabulate *import* tabulate

*from* simple\_term\_menu *import* TerminalMenu

salesDict = {

"Clarence Carson": {

"Name": "Clarence Carson",

"Salary": 250.00,

"Gross sales": 1000.00,

"Rate": 3.2,

},

"Daphne Danvers": {

"Name": "Daphne Danvers",

"Salary": 100.00,

"Gross sales": 6000.00,

"Rate": 6.5

},

"Julia Jefferson": {

"Name": "Julia Jefferson",

"Salary": 100.00,

"Gross sales": 4000.00,

"Rate": 3.2

},

"Randolph Reeds": {

"Name": "Randolph Reeds",

"Salary": 250.00,

"Gross sales": 2000.00,

"Rate": 6.5

},

"Sabrina Sanders": {

"Name": "Sabrina Sanders",

"Salary": 250.00,

"Gross sales": 3000.00,

"Rate": 3.2

}

}

def buildTableFromDict(*dict*, *headers*):

data = [[j *for* j *in* i.values()] *for* i *in* *dict*.values()]

table = tabulate(data, *headers*=*headers*,

*tablefmt*="github", *numalign*="left")

*return* table

def calculateAndSetCommisionAndIncome(*salesperson*, *dict*):

rate = *dict*[*salesperson*]["Rate"]

grossSales = *dict*[*salesperson*]["Gross sales"]

commission = rate \* grossSales

grossIncome = commission + grossSales

*dict*[*salesperson*].update(

{"Commission": round(commission, 2), "Gross Income": round(grossIncome, 2)})

*return* commission

def selectAndViewSalesPerson(*dict*):

options = list(*dict*.keys())

entry = TerminalMenu(

options, *title*="\nWho would you like to inspect?").show()

salesperson = *dict*[options[entry]]

*for* item *in* salesperson.items():

print(f"{item[0]} : {item[1]}")

def main():

global salesDict

"""

• computes the commission amount of each salesperson by multiplying their gross sales and their commission rate

• computes the gross income of each salesperson by adding their base salary to their commission amount

• generates a report that lists the total commission amounts of all of the salespersons

• allows the program user to query a particular salesperson to obtain their respective data values

"""

print("\nHello and welcome to the commissions calculator! \n")

*while* True:

entry = TerminalMenu(["View Salespersons Table", "Calculate total commisions and salary",

"View particular salesperson", "Exit"], *title*="\nWhat would you like to do?").show()

*if* entry == 0:

print(buildTableFromDict(salesDict, [

"Name", "Salary", "Gross Sales", "Rate", "Commission", "Gross Income"]))

*elif* entry == 1:

*for* salesperson *in* salesDict.keys():

calculateAndSetCommisionAndIncome(salesperson, salesDict)

print(buildTableFromDict(salesDict, [

"Name", "Salary", "Gross Sales", "Rate", "Commission", "Gross Income"]))

*elif* entry == 2:

selectAndViewSalesPerson(salesDict)

*else*:

print("Goodbye!")

exit()

*if* \_\_name\_\_ == "\_\_main\_\_":

main()

**OUTPUT**

**Please view attached video!**