Metropolitan State University, Saint Paul, Minnesota

ICS 140 Computational Thinking with Programming

Assignment 9

**Monthly Sales Tax**

A retail company must file a monthly sales tax report listing the total sales for the month, and the amount of state and county sales tax collected. The state sales tax rate is 5% and the county sales tax is 2.5%. Write a program that asks the user to enter the total sales for the month. From this figure, the application should calculate and display the following:

* The amount of county sales tax
* The amount of state sales tax
* The total sales tax (county plus state)

Each tax amount should be formatted to print out to 2 decimal places as shown below.

Text

Description automatically generated

For the problem below, complete the following steps:

* Run the provided test cases in test\_assignment9.py and make sure they fail.
* Create Python Code for the county\_tax, state\_tax and total\_tax functions.
* Rerun the test cases in test\_assignment9.py and make sure they pass.
* Create the main function to prompt users for the total sales for the month. The main function should call the other functions to calculate the tax amounts to be printed.
* Copy and paste the python code in the python code section or upload the python file along with this file.
* Take a screenshot of passed automated tests and paste it in the section below OR run your tests manually.
* Take a screenshot of the program output and paste it below.

**Assignment 9 Python Code**

def county\_tax(*sales*):

county\_tax = 0.025

*return* *sales* \* county\_tax

*# This function should receive the sales for a month and return the county tax*

def state\_tax(*sales*):

state\_tax = 0.05

*return* *sales* \* state\_tax

*# This function should receive the sales for a month and return the county tax*

def total\_tax(*county*, *state*):

*return* *county* + *state*

def main():

sales = float(input("Please enter in amount to calculate tax : "))

state = state\_tax(sales)

county = county\_tax(sales)

total = total\_tax(state,county)

print(f"The county tax is : ${county:.2f}")

print(f"The state tax is : ${state:.2f}")

print(f"The total tax is : ${total:.2f}")

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

main()

**Screenshot of Passed Automated Tests OR manual test screenshots**

**Text

Description automatically generated**

**Screenshot of Program Output**

In above picture