**PART 1:**

def calculate\_bill(food\_charge):

    tip\_rate = 0.18

    tax\_rate = 0.07

    tip = food\_charge \* tip\_rate

    tax = food\_charge \* tax\_rate

    total = food\_charge + tip + tax

    return {

        "Food Charge": food\_charge,

        "Tip (18%)": tip,

        "Tax (7%)": tax,

        "Total Bill": total

    }

#Ask user for the food charge

# This script calculates the total bill including tip and tax based on the food charge provided by the user.

try:

    user\_input = input("Enter the food charge: $")

    food\_charge = float(user\_input)

    if food\_charge < 0:

        print("Please enter a valid food charge greater than or equal to 0.")

    else:

        bill = calculate\_bill(food\_charge)

        print("\n----- Bill Summary -----")

        for item, amount in bill.items():

            print(f"{item}: ${amount:.2f}")

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

except ValueError:

    print("Invalid Entry. Please enter a valid number.")

A screen shot of a computer

AI-generated content may be incorrect.

[**https://github.com/TiaHorton/CSC500/blob/eb0da7f5436c0bd732643b8c4f38f50691fc7f53/Assignment\_3\_P1.py**](https://github.com/TiaHorton/CSC500/blob/eb0da7f5436c0bd732643b8c4f38f50691fc7f53/Assignment_3_P1.py)

**PART 2:**

def convert\_to\_12\_hour(hour):

    if hour == 0:

        return "12:00 AM"

    elif hour == 12:

        return "12:00 PM"

    elif hour < 12:

        return f"{hour}:00 AM"

    else:

        return f"{hour - 12}:00 PM"

try:

    current\_time = int(input("Enter the current time in 24-hour format (0-23): "))

    wait\_hours = int(input("Enter the number of hour(s) to wait: "))

    if 0 <= current\_time < 24:

        alarm\_time\_24 = (current\_time + wait\_hours) % 24

        alarm\_time\_12 = convert\_to\_12\_hour(alarm\_time\_24)

        print(f"\nAlarm will ring at:")

        print(f" - {alarm\_time\_24}:00 (24-hour format)")

        print(f" - {alarm\_time\_12} (12-hour format)")

    else:

        print ("Invalid time entered. Please enter a valid 24-hour format time (0-23).")

except ValueError:

    print("Invalid input. Please enter whole numbers only.")

A screenshot of a computer program

AI-generated content may be incorrect.

[**https://github.com/TiaHorton/CSC500/blob/eb0da7f5436c0bd732643b8c4f38f50691fc7f53/Assignment\_3\_P2.py**](https://github.com/TiaHorton/CSC500/blob/eb0da7f5436c0bd732643b8c4f38f50691fc7f53/Assignment_3_P2.py)