**Program #1: Meal pricing**

**Pseudo Code:**

Prompt the member to enter the total meal price cost:

Convert the number to a float format

Verify if the meal price entered is > 0

If mean price <= 0 then raise exception

Else

Calculate tip amount = meal\_price \* 0.18

Calculate tax amount = meal\_price \* 0.07

Calculate total amount to be paid:

meal\_price + tip\_amount + tax\_amount

Print the ‘Subtraction’ value to the output screen

**GitHub link:** <https://github.com/sahiraj15/aiml/blob/main/csc500/m3_process_meal_amount.py>

**Results:**

**A screenshot of a computer program

Description automatically generatedUse case #1**: Meal price = 0, throw exception

**Use case #2**: Meal price < 0, throw exception

A screenshot of a computer program

Description automatically generated

**Use case #3**: Meal price > 0 (Decimal Value, Display TIP\_AMOUNT, TAX\_AMOUNT, and TOTAL\_AMOUNT

A screenshot of a computer program

Description automatically generated

**Use case #4**: Meal price > 0 (Integer Value), Display TIP\_AMOUNT, TAX\_AMOUNT, and TOTAL\_AMOUNT

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**Program #2: Evaluate clock time(24H) on alarm time completion**

**Pseudo Code:**

Prompt the user to enter current time in hours

Prompt the user to enter the alarm time in hours

* 1. raise exception if current time entered is > 23,
  2. raise exception if current time entered is < 0
  3. raise exception if current time entered is a decimal
  4. raise exception if alarm time entered is < 0
  5. raise exception if current time entered is a decimal

Evaluate the time at which the alarm goes off

1. Add current time and alarm time
2. Divide outcome of a) with 24, the reminder would be expected result

**GitHub link:** <https://github.com/sahiraj15/aiml/blob/main/csc500/m3_24h_clock_determine_alarm_time.py>

**Results:**

A screenshot of a computer program

Description automatically generated**Use case #1**: current\_time > 23, throw exception

**Use case #2**: current\_time < 0, throw exception

A screenshot of a computer program

Description automatically generated

**Use case #3**: alarm\_time < 1, throw exception

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**Use case #4**: current\_time is a decimal, throw exception

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**Use case #5**: alarm\_time is a decimal, throw exception

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**Use case #6**: All valid inputs, display the alarm switch off time

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

References:

* + 1. Zyka Labs
    2. [www.realpython.com](http://www.realpython.com) for generic reference.