**CSD 1133 – 2023S**

**Student ID:** 901142 **Student Name:** Roshan Shrestha **Assignment # 7**

**----------------------------------------------------------------------------------------------------------------**

**Pseudocode:**

Module Main()

// Declare local variable to store total work hour, hourly pay rate and calculated gross pay

Declare Real workHours

Declare Real hourPayRate

Declare Real calculatedGrossPay

// Calculate and get pay per hour

Set hourPayRate = getPayRate()

// Calculate and get total work hours

Set workHours = getWorkHours()

// Calculate and store gross pay

Set calculatedGrossPay = workHours \* hourPayRate

// Display grosspay output to user

Display "Your gross pay is: $" + calculatedGrossPay

End Module

Function Real getPayRate()

// Declare local variable to store user input for hourly pay rate and its validation status

Declare Real inputPayRate

Declare Boolean isPayRateInValid

// Ask user their pay rate per hour

Display "Please enter your hourly pay rate: $"

Input inputPayRate

// Check and validate if pay rate is between 7.50 to 18.25

Set isPayRateInValid = isInValid(inputPayRate, 7.50, 18.25)

While isPayRateInValid

Display "Invalid hourly pay rate. Please enter a inputValue between $7.50 and $18.25: "

Display "Please enter your hourly pay rate: $"

Input inputPayRate

Set isPayRateInValid = isInValid(inputPayRate, 7.50, 18.25)

End While

Return inputPayRate

End Function

Function Real getWorkHours()

// Declare local variable to store user input for work hours and its validation status

Declare Real inputWorkHours

Declare Boolean isWorkHoursInValid

// Ask user input for total hours worked

Display "Please enter your total work hours: "

Input inputWorkHours

// Check and validate if hours worked is between 0 to 40

Set isWorkHoursInValid = isInValid(inputWorkHours, 9, 40)

While isWorkHoursInValid

Display "Invalid hours worked. Work hours must be between 0 to 40 !"

Display "Please enter your total work hours: "

Input inputWorkHours

Set isWorkHoursInValid = isInValid(inputWorkHours, 9, 40)

End While

Return inputWorkHours

End Function

// Validate the condition with passed inputValue and return true if the inputValue is valid and false otherwise

Function Boolean isInValid(inputValue, minValue, maxValue)

Declare Boolean validStatus

If inputValue < minValue OR inputValue > maxValue Then

Set validStatus = True

Else

Set validStatus = False

End If

Return validStatus

End Function

A close-up of a card

Description automatically generated**Flow Chart:**

Figure : Main Module

A screenshot of a cell phone

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Figure : Function to get hourly pay.

A screenshot of a chat

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Figure : Function to get total worked hours.

A screenshot of a computer screen

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Figure : Function to validate the input.