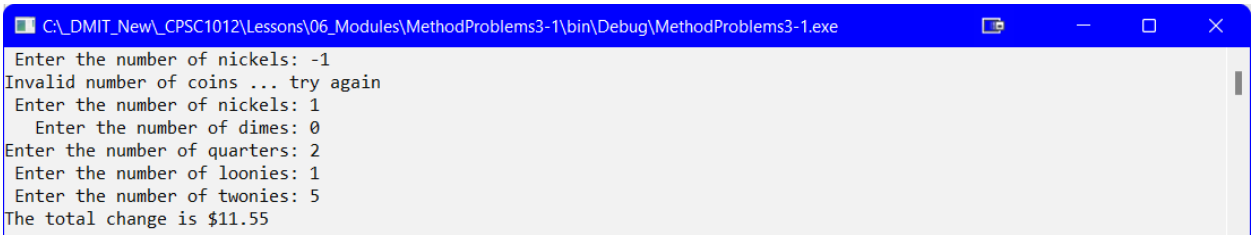
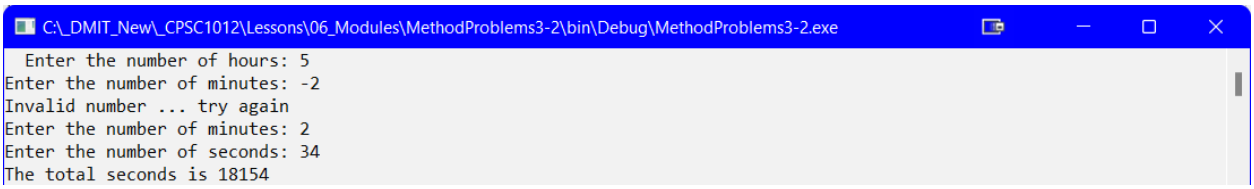
Method Problems 3

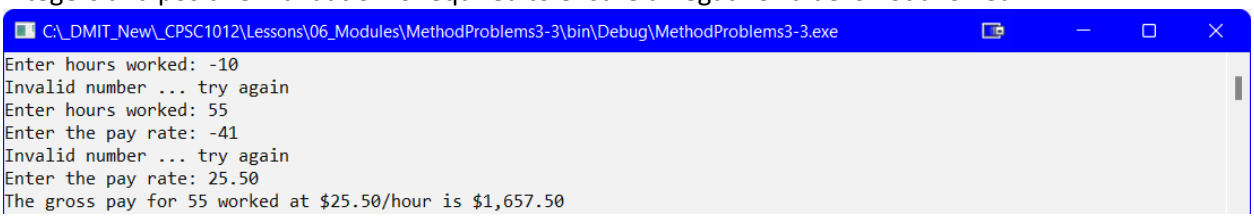
1. Write a program to tally up total change from user's pockets. The method `GetTotal()` will have number of nickels, dimes, quarters, loonies, and toonies passed into it and will return the total amount. All values entered must be integers and positive. Validation is required to ensure a negative value is not allowed.



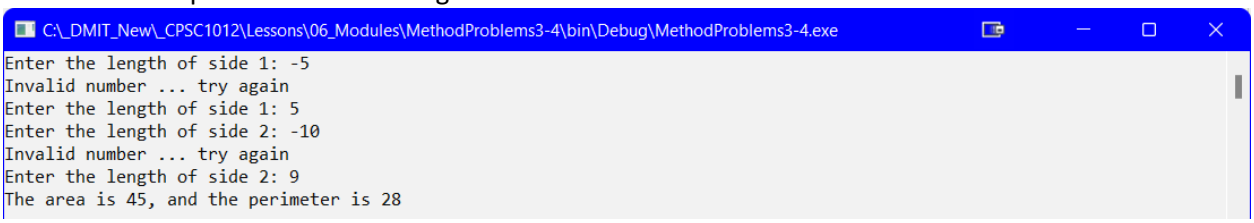
2. Write a program that will return the number of seconds from hours, minutes, and seconds. The method `CalculateSeconds()` will be passed in hours, minutes and seconds. All values entered must be integers and positive. Validation is required to ensure a negative value is not allowed.



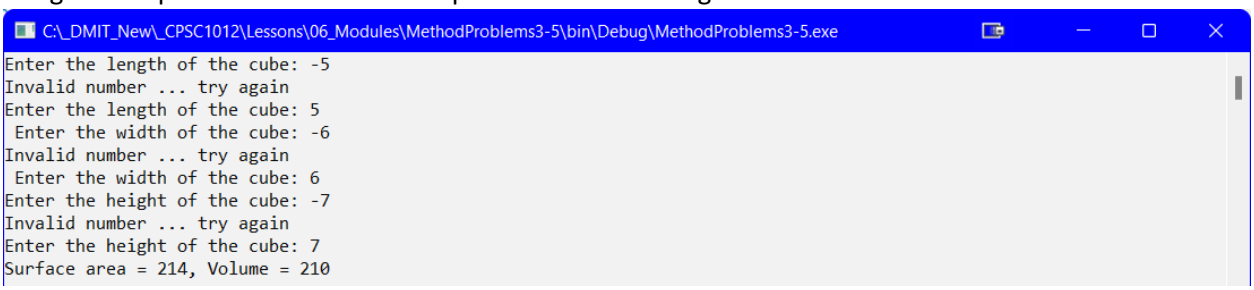
3. Write a program to calculate pay. The method `CalculatePay()` will be passed in hours and pay rate and will return gross pay. Pay time and a half for any hours that are worked over 40 but less than 50. Pay double time for any hours that are worked over 50. All values entered must be integers and positive. Validation is required to ensure a negative value is not allowed.



4. Write a program to calculate and display the area and perimeter of a rectangle. The methods `CalculateArea()` and `CalculatePerimeter()` will be passed in 2 values, length and width, and will return the appropriate value. All values entered must be integers and positive. Validation is required to ensure a negative value is not allowed.



5. Write a program to calculate and display the surface area and volume of a cube. The methods `CalculateSurfaceArea()` and `CalculateVolume()` will be passed in 3 values, length, width, and height, and will return the appropriate value. The `CalculateSurfaceArea()` method will call the `CalculateArea()` method created above. All values entered must be integers and positive. Validation is required to ensure a negative value is not allowed.

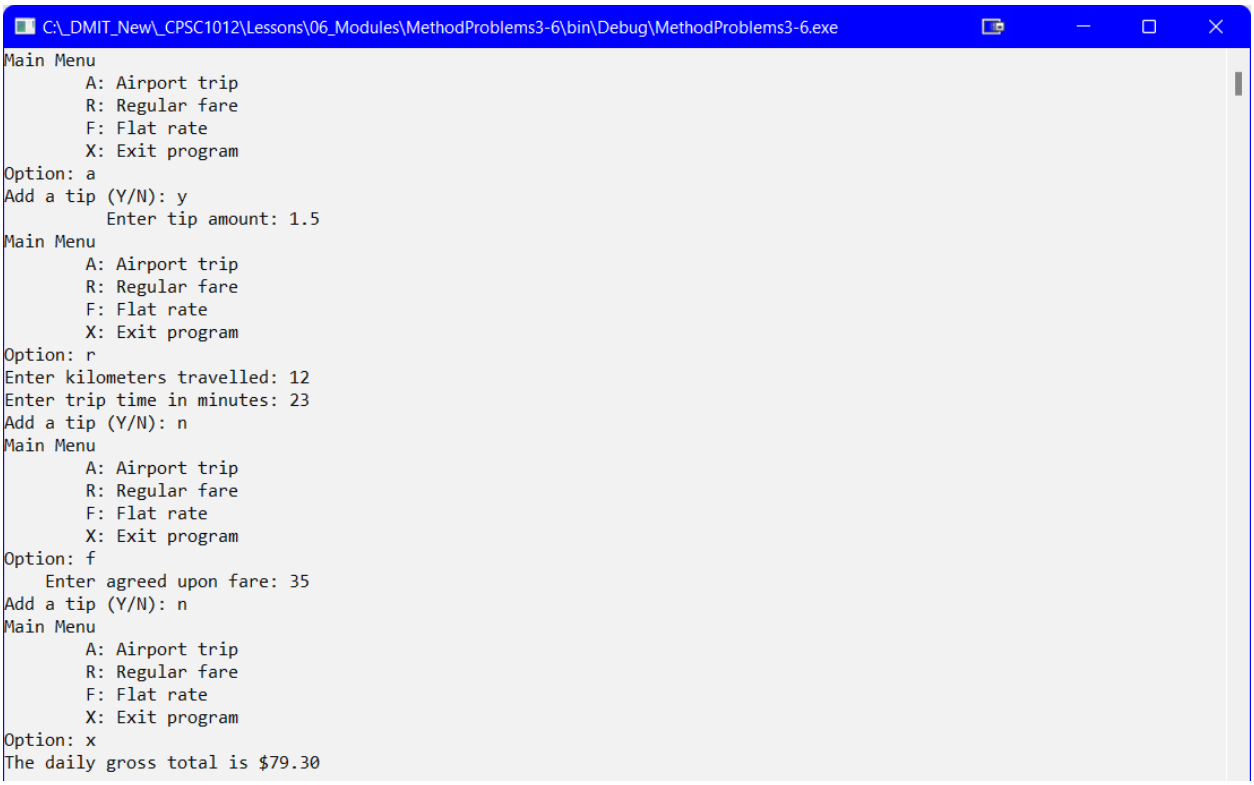


6. Write a program to keep track of revenue for your one-person taxi company. You must use a menu.

   A: Airport trip – charge is $25.00
   R: Regular fare – enter distance traveled and time of trip and calculate the fare based on the following rates:
      Charge per kilometre: $1.10
      Charge per minute: $0.20
   F: Flat rate – enter and charge the agreed-upon amount
   X: Exit program

   After each fare, enter the amount of tip paid. If no tip was given, enter $0.00 for amount of tip.

   At the end of the day, display Total Gross Income.


C:_DMIT_New_CPSC1012\Lessons\06_Modules\MethodProblems3-6\bin\Debug\MethodProblems3-6.exe
Main Menu
A: Airport trip
R: Regular fare
F: Flat rate
X: Exit program
Option: a
Add a tip (Y/N): y
Enter tip amount: 1.5
Main Menu
A: Airport trip
R: Regular fare
F: Flat rate
X: Exit program
Option: r
Enter kilometers travelled: 12
Enter trip time in minutes: 23
Add a tip (Y/N): n
Main Menu
A: Airport trip
R: Regular fare
F: Flat rate
X: Exit program
Option: f
Enter agreed upon fare: 35
Add a tip (Y/N): n
Main Menu
A: Airport trip
R: Regular fare
F: Flat rate
X: Exit program
Option: x
The daily gross total is $79.30