**Pseudo code For Part 1**

**Pseudo code for Driver Class(FA2023\_CarpetProjectQuote\_Gautam.java)**

Function main():

userName = "Dipesh Gautam"

userAddress = "123 Walnut Road Dallas TX 75243"

displayMenu()

totalArea = 0.0

carpetCost = 0.0

laborCost = 0.0

materialsCost = 0.0

shapeChoice = 0

Repeat:

Prompt user to enter choice

Read shapeChoice

Switch shapeChoice:

Case 1:

// Read square dimensions

// Calculate area using calculateSquareArea

// Add area to totalArea

// Add cost calculations to carpetCost, laborCost, materialsCost

// Display project details for the shape

// Add cases for other shapes

Case 6:

// Display final project quote

Default:

Display "Invalid choice. Please try again."

Until shapeChoice is 6

DisplayFinalQuote(userName, userAddress, totalArea, carpetCost, laborCost, materialsCost)

Function displayMenu():

// Display the menu options

Function calculateCarpetCost(area):

// Calculate carpet cost

Function calculateLaborCost(area):

// Calculate labor cost

Function calculateMaterialsCost(carpetCost):

// Calculate materials cost (10% of carpet cost)

Function calculateSubtotal(carpetCost, laborCost, materialsCost):

// Calculate subtotal

Function calculateTax(subtotal):

// Calculate tax (8.25% on subtotal)

Function displayFinalQuote(userName, userAddress, totalArea, carpetCost, laborCost, materialsCost):

// Display final project quote

Pseudo code for Data type Class(FA2023\_ClassWithStaticMember\_Gautam.java)

Class FA2023\_ClassWithStaticMember\_Gautam:

Static Method calculateSquareArea(side)

Static Method calculateRectangleArea(length, width)

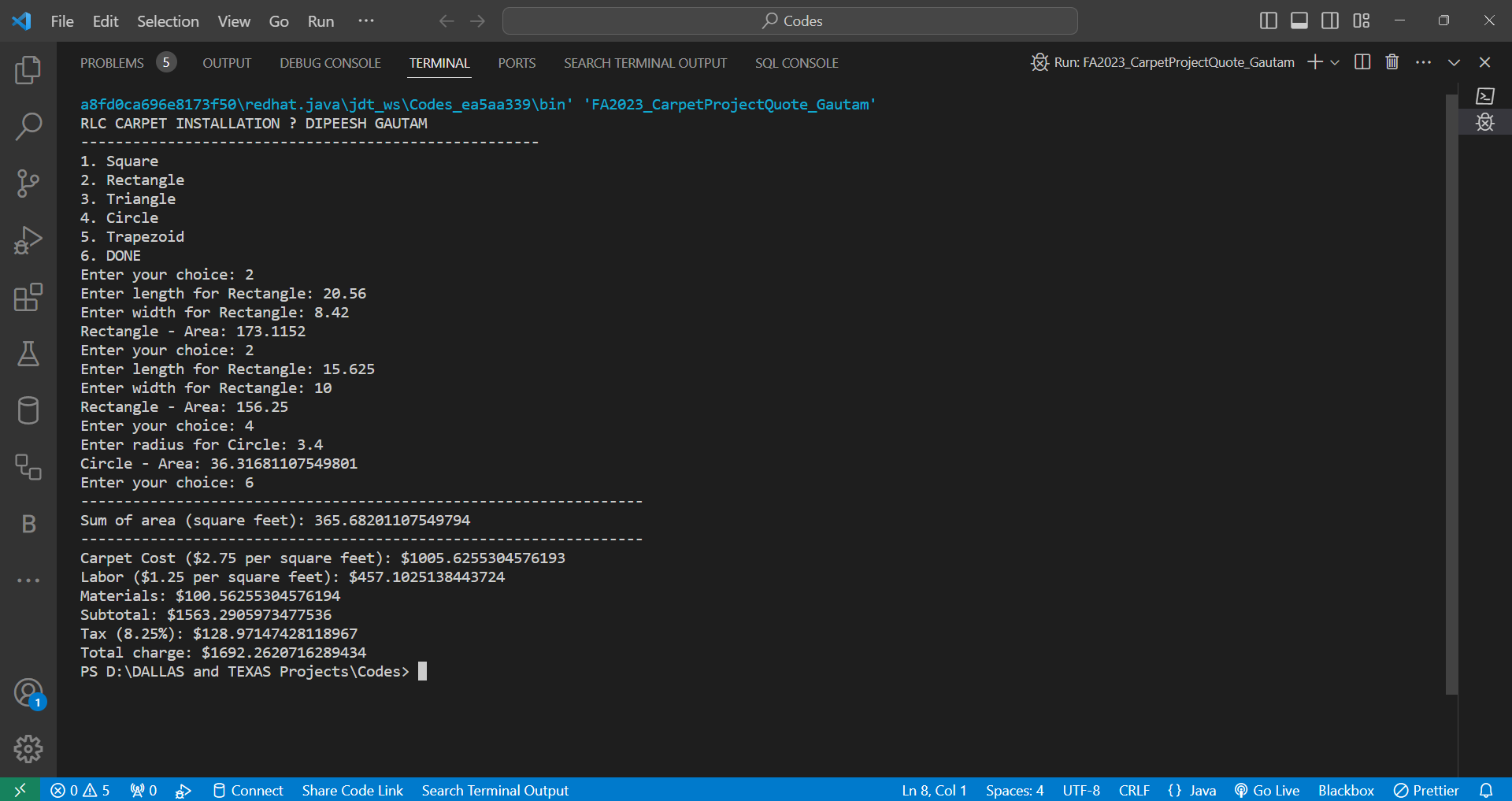
Static Method calculateTriangleArea(base, height)

Static Method calculateCircleArea(radius)

Static Method calculateTrapezoidArea(base1, base2, height)

Static Method calculateParallelogramArea(base, height)

**<<<<<<<<<<<<<OUTPUT PICTURES>>>>>>>>>>>>>>>>>>>>>**

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