

## Problem 1

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- 5 variables to hold destination, miles, gallons, milesPerGallon, totalMiles, and tripCount</li> <li>- Asks and stores input for destination, miles to destination, and amount of gallons used</li> <li>- Function to calculate miles per gallon</li> </ul>	<ul style="list-style-type: none"> <li>- While loop to continue the code until the user presses ctrl + z</li> <li>- Divides miles by gallons to get milesPerGallon</li> <li>- Adds miles to total miles to get overall miles</li> <li>- Adds 1 to trip count to get overall trip count</li> </ul>	<ul style="list-style-type: none"> <li>- Displays destination</li> <li>- Displays miles travelled</li> <li>- Displays gallons used</li> <li>- Displays miles per gallon</li> <li>- Displays total miles travelled</li> <li>- Displays total number of trips</li> </ul>

## Problem 2

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- 7 variables to hold lastName, jobCode, hoursWorked, pay, averagePay, totalPay, and entryCount</li> <li>- Asks and stores input for last name, job code, hours worked, and pay amount</li> <li>- Function to calculate pay</li> </ul>	<ul style="list-style-type: none"> <li>- While loop to continue the code until the user presses ctrl + z</li> <li>- Calculates pay using the function to compile payrate and pay depending on jobCode and hoursWorked</li> <li>- Adds pay to total pay (overall pay)</li> <li>- Adds 1 to entry count to count total (overall entry count)</li> </ul>	<ul style="list-style-type: none"> <li>- Displays last name</li> <li>- Displays pay amount</li> <li>- Displays total pay</li> <li>- Displays total number of entries</li> <li>- Displays average pay</li> </ul>

	<ul style="list-style-type: none"> <li>- Divides totalPay by entryCount to get averagePay</li> </ul>	
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### Problem 3

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- 5 variables to hold lastName, creditsTaken, tuition, totalTuition, and studentCount</li> <li>- Asks and stores input for last name, and credits taken</li> <li>- Function to calculate tuition</li> </ul>	<ul style="list-style-type: none"> <li>- While loop to continue the code until the user presses ctrl + z</li> <li>- Using the function, multiplies creditsTaken by 250 to get tuition amount</li> <li>- Adds tuition to totalTuition (overall)</li> <li>- Adds 1 count to studentCount to get total (overall)</li> </ul>	<ul style="list-style-type: none"> <li>- Displays last name</li> <li>- Displays credits taken</li> <li>- Displays amount of tuition owed</li> <li>- Displays total tuition</li> <li>- Displays number of students</li> </ul>

### Problem 4

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- 8 variables to hold productCode, quantity, unitPrice, shipping, extendedPrice, total, grandTotal, and entryCount</li> <li>- Asks and stores product code and quantity</li> </ul>	<ul style="list-style-type: none"> <li>- While loop to continue the code until the user presses ctrl + z</li> <li>- Using the function, calculates unitPrice depending on productCode</li> </ul>	<ul style="list-style-type: none"> <li>- Displays product code</li> <li>- Displays unit price</li> <li>- Displays shipping cost</li> <li>- Displays extended price</li> </ul>

<ul style="list-style-type: none"> <li>- 2 functions to calculate unitPrice and shippingCost</li> </ul>	<ul style="list-style-type: none"> <li>- Using the function, calculates shippingCost depending on the productCode</li> <li>- Adds total to grandTotal (overall)</li> <li>- Adds 1 count to entryCount (overall)</li> </ul>	<ul style="list-style-type: none"> <li>- Displays total amount</li> <li>- Displays total of all entries</li> <li>- Displays total number of entries</li> </ul>
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#### Problem 5

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- 5 variables to hold, type of department, courseCode, labFee, totalLabFees, and courseCount</li> <li>- Asks and stores input for type of department and course code</li> <li>- Function to calculate labFee based off of type of department and course code</li> </ul>	<ul style="list-style-type: none"> <li>- While loop to continue the code until the user presses ctrl + z</li> <li>- Using the function, calculates labFee depending on department and course code</li> <li>- Adds labFee to totalLabFees (overall)</li> <li>- Adds 1 count to courseCount (overall)</li> <li>- Divides totalLabFees by courseCount to get averageLabFee</li> </ul>	<ul style="list-style-type: none"> <li>- Displays department</li> <li>- Displays course code</li> <li>- Displays lab fee</li> <li>- Displays total lab fee</li> <li>- Displays total number of courses</li> <li>- Displays average lab fee</li> </ul>