|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| 1. First Exam Score as (**real)** 2. Second Exam Score as (**real)** | * Display greeting & instructions as (**text)** * Multiply first exam score by 0.6 * Multiply second exam score by 0.4 * Add weighted scores to get total as (**real)** * Display a “calculating” message and pause for suspense | * Display total weighted score (**real**) * Display closing message (**text**) |

# Problem 1

# Problem 2

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| 1. Purchase price per share as (**real)** 2. Current stock price as (**real)** 3. Quantity of stock owned (**real**) | * Display greeting and instructions (**text**) * Subtract purchase price from current price (**real**) * Multiply result by quantity (**real**) * Determine if the result is a gain, loss, or break-even (**real**) | * Display value change (**real**) * Display message indicating gain, loss, or no change (**text**) |

# Problem 3

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| 1. Total cost of meal as (**real**) | * Multiply meal total by 0.15 for 15% tip (**real**) * Add tip to meal total to get total with tip (**real**) * Repeat this process for 18% and 20% tips (**real**) | * Format output with labels and spacing (**text**) * Display meal total (**real**) * Display tip amount (**real**) * Display total with tip (**real**) * Repeat for each tip percentage with blank lines between sets (**text**) |

# Problem 4

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| 1. First name (**text**) 2. Number of steps walked (**real**) | * Multiply number of steps by 0.25 for calories burned (**real**) * Format output with name and result (**text + real**) | * Display first name (**text**) * Display calories burned (**real**) |

Problem 5

|  |  |  |
| --- | --- | --- |
| **Input** | **Process** | **Output** |
| 1. Fixed Costs (**real**) 2. Price Per Unit (**real**) 3. Cost Per Unit (**real**) | * Subtract price per unit from cost per unit (**real**) * Divide fixed costs by the result (**real**) * Multiply second exam score by 0.4 * Handle division by zero if price equals costs | * Display break-even point (**real**) * Display message explaining result (**text**) |