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| Step # | Guideline Step |  |
| 1 | Problem Statement/Highlighting | A person weighs 180 pounds, and 100 calories are burned per mile. The program needs to use a loop to calculate and display how many calories are burned when running after miles 3 through 8. |
| 2 | One sentence problem statement | The program needs to display how many calories are burned by a 180 pound man when running 3 through 8 miles if they burn 100 calories a mile. |
| 3 | List of Do Somethings | Initialize caloriesPerMile variable  Loop 9 times (Starts at 0, ends at 8)  If the loop is >2, multiply caloriesPerMile by the loop number and assign it to caloriesBurned  Print caloriesBurned to console |
| 4 | Solve problem by hand | Loop 0, fail if statement  Loop 1, fail if statement  Loop 2, fail if statement  Loop 3, 3\*100, print 300  Loop 4, 4\*100, print 400  Loop 5, 5\*100, print 500  Loop 6, 6\*100, print 600  Loop 7, 7\*100, print 700  Loop 8, 8\*100, print 800 |
| 5 | Flowchart | See KlineMidterm1.png |
| 6 | Psuedocode | Step 1: Define main() function  Step 2: initialize caloriesPerMile variable and set to 100  Step 3: Create for loop that loops 9 times  Step 4: If statement which checks if the loop is on iteration 3 or greater  Step 5: If the if statement is true, multiply caloriesPerMile by loop iteration and assign to caloriesBurned  Step 6: Print caloriesBurned to console  Step 7: Repeat loop until finished  Step 8: Call main() |
| 7 | Are 4 and 5 in sync? | Yes |