

```

1      int n;                      // Number of mileage values to process
2      double mileage;             // A mileage value to input
3      double reimb;              // Reimbursement amount for one mileage value
4      double base;               // Base amount for a reimbursement
5      double rate;              // Rate per mile to reimburse
6      double overage;            // Mileage overage on which to calculate rate per mile
7
8      double mileageTotal = 0;    // Total mileage for input mileages > 0
9      double reimbTotal = 0;     // Total reimbursement dollar amount
10     int mileagePositive = 0;    // Number of mileage values > 0
11
12     Scanner keyboard = new Scanner(System.in);    // Assign keyboard input
13
14     // Get the number of mileage values to process
15
16     System.out.print(
17         "Enter the number of mileage values to process (0 to exit): ";
18     n = keyboard.nextInt();
19     if (n <= 0) {
20         System.out.println("Have a great day!");
21         System.exit(0);
22     }
23
24     // Get n mileage values, calculate reimbursements and totals and
25     // print the mileage and reimbursement amounts or "*****"
26
27
28
29     for (int i = 1; i <= n; i++) {
30         System.out.print("Enter mileage value #" + i + " of " + n + ": ");
31         mileage = keyboard.nextDouble();
32
33         // Display the mileage value whether <= 0 or > 0
34         System.out.print("Mileage: " + mileage + "\tReimbursement: ");
35         if (mileage <= 0) {
36             System.out.println("*****");    // Print just the stars and...
37             continue;                        // move on to the next mileage value
38         }
39         else if (mileage <= 500) {base = 0; rate = 0.15; overage = mileage;}
40         else if (mileage <= 1000) {base = 75; rate = 0.12; overage = mileage - 500;}
41         else if (mileage <= 2000) {base = 135; rate = 0.10; overage = mileage - 1000;}
42         else {base = 235; rate = 0.08; overage = mileage - 2000;}
43
44         // Calculate and print the reimbursement amount and cacclulate running totals
45
46         reimb = base + (rate * overage);
47         mileageTotal += mileage;
48         reimbTotal += reimb;
49         mileagePositive++;
50         System.out.println(reimb); // Note that the mileage has already been printed
51     } // End of for loop(int i...)
52
53     // Output the totals, leaving a blank line before the messages
54
55     System.out.println(
56         "\nNumber of positive mileage values processed: " + mileagePositive +
57         " of " + n + " values input.\n" +
58         "Total mileage: " + mileageTotal + "\n" +
59         "Total reimbursement: " + reimbTotal);
60
61 } // end calculateReimbursement
62

```