```
/* SELF ASSESSMENT
   1. Did I use easy-to-understand meaningful variable names?
      Mark out of 10: 10
      Comment: All variable were meaningful and appropriate.
   2. Did I format the variable names properly (in lowerCamelCase)?
      Mark out of 5: 5
      Comment: All variable names in lowerCaseCamel.
   3. Did I indent the code appropriately?
      Mark out of 10: 10
      Comment: All code indented appropriately.
   4. Did I input the numbers one at a time from the command line?
      Mark out of 10:  10
      Comment: Inputed code one at a time.
   5. Did I check the input to ensure that invalid input was handled appropriately?
      Mark out of 10:  10
      Comment: Had a counter measure for if it was not a valid input.
   6. Did I use an appropriate while or do-while loop to allow the user to enter numbers until they entered exit/quit?
      Mark out of 20:  20
      Comment: Loop was appropriate.
   7. Did I implement the loop body correctly so that the average and variance were updated and output appropriately?
      Mark out of 30:  30
      Comment: Updated on every interval as well as kept the last value every time
   8. How well did I complete this self-assessment?
      Mark out of 5: 5
      Comment: I felt I had a good grasp of the assignment and completed it appropriately.
   Total Mark out of 100 (Add all the previous marks): 100
*/
import java.util.Scanner;

public class IncrementalStatistics {

        public static void main(String[] args) {

                double numberCount = 0;
                double average = 0;
                double variance = 0;
                double lastAverage = 0;
                double lastVariance = 0;

                boolean finished = false;

                Scanner input = new Scanner( System.in);
                System.out.println("This program computes the average"
                                + " and variance of all numbers entered.");

                while (finished == false)
                {
                        numberCount++;
                        if (numberCount == 1)
                        {
                                System.out.println("\nEnter a number (or type 'exit'):");
                        }
                        else
                        {
                                System.out.println("\nEnter another number (or type 'exit'):");
                        }
                                if (input.hasNextDouble())
                                {
                                        double number = input.nextDouble();

                                        average = lastAverage + (number - lastAverage) / numberCount;

                                        variance = ((lastVariance * (numberCount - 1)) +
                                                        (number - average) * ( number - lastAverage))
                                                        / numberCount;

                                        lastAverage = average;

                                        lastVariance = variance;

                                        System.out.println("\nSo far the average "
                                                        + "is "+average+" and the variance is "+variance);
                                }
                                else if (input.hasNext("exit"))
                                {
                                        finished = true;
                                        input.close();
                                }
                                else if (input.hasNext("quit"))
                                {
                                        finished = true;
                                        input.close();
                                }
                                else
                                {
                                        System.out.println("\nNot a valid number. Please try again.");
```

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                                finished = true;
                            }


                }
                System.out.println("\nGoodbye.");
        }
}
```