Assignment 4:

- **Q1:** Design and implement a program that reads a series of 5 doubles from the user and prints their average. Read each input value as a string, and then attempt to convert it to a double using the `Double.parseDouble` method. This method will throw an exception if the parameter given to it cannot be parsed. Read the <u>online documentation</u> to determine what exception should be caught. If this exception occurs (meaning that the input is not a valid number), print an appropriate error message and prompt for the number again. Continue reading values until 5 valid doubles have been entered. [15 points]

  Sample Output:
  ```
  Please enter a number: 5
  Please enter a number: 5.5
  Please enter a number: number
  Please enter a valid number.
  Please enter a number: '1
  Please enter a valid number.
  Please enter a number: 2
  Please enter a number: 3.44565
  Please enter a number: 1
  The average is 3.38913.
  ```

- **Q2:** Write a program that reads strings from the user and writes them to an output file called userStrings.txt. Stop processing when the user enters the string "DONE". Do not write the sentinel string ("DONE") to the output file. [15 points] Hint: For a complete example of file IO, please see the attached TestData program.

  Sample Output:
  ```
  A string.
  Another string.
  Yet more text...
  DONE
  ```

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