In Class Assignment

Develop a program in two parts:

- avgNoZeroMain.c, which reads doubles until there are no more (up to a maximum of 1000), adding each to the end of an array, keeping a count of the number of doubles added. After reading all the numbers available (again, up to a maximum of 1000), main() calls the avgNoZero() function and prints the average returned, along with the count. Specify 6 digits after the decimal point when printing the average.
- avgNoZero.c which contains a function that has the following prototype:

  double avgNoZero(double array[], int size);

  and the following Javadoc-style function comment:

```
/**
* This function returns the average of the numbers in array,
* not counting zeroes. Returns zero if size <= 0.
*
* @param array an array of doubles
* @param size the number of doubles in array to average
* @return the average of the numbers in array, not counting zeroes,
*    or zero if size <= 0.
*/
```

Provided with this assignment is a file of random doubles. By using the sed command, different numbers of those doubles can be fed to your program, using the pipe mechanism.

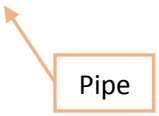
```
MyPrompt> gcc -g -Wall avgNoZero.c avgNoZeroMain.c -o avgNoZero

MyPrompt> avgNoZero
1 2 3 4 5 q
Average = 3.000000
count = 5

MyPrompt> avgNoZero
0 1 2 0 3 0 4 5 stop
Average = 3.000000
count = 8

MyPrompt> sed 500q randomDoubles50K.txt | avgNoZero
Average = 2416.214598
count = 500

MyPrompt>
```



Submit avgNoZero.c and avgNoZeroMain.c.