

1. Revel Chapter 5 Exercise 2
2. Use a while loop to write a program that calculates an average. The user will enter -1 to stop.
3. (Mathematics) In number theory, a perfect number is defined as some positive integer whose value is the sum of its positive divisors.
 - a. i.e $6 = 1 * 2 * 3$ (You can always assume 1 is a divisor for this case). Since $1 + 2 + 3 = 6$ then we say 6 is a perfect number
 - b. Write a Java program to display the first 4 perfect numbers. For help look at the primenumber.java file from your lab. Similar concepts are being used.
 - c. Hint: The biggest thing that can divide some number n is $\frac{n}{2}$ (we are using INTEGER DIVISION here). We need to check that number.
 - d. Hint 2: If you keep a running sum of the divisors what happens when the loop finishes?
 - e. The first four perfect numbers are: 6,28,496,8128. If you're curious google the 5th. It is big
 - f. I want you to properly declare constants.