LoopingFun

Complete the following methods for the LoopingFun class. These methods will be on your next quiz. Look for the most efficient algorithms. They are listed alphabetically. I have included numbers to determine the best order to complete these.

Method Summary	
15 int	binary (int n) Returns the binary (Base 2) equivalent on integer n:
10 void	coinTrials (int n) Returns the results(totals) of a simulation experiment of n trials of a coin toss: ie (for n = 100). Heads: 47 Tails: 53
11 int	countDigits (int n) counts the digits an integer n
3 long	factorial (int n) Calculates the value of n! (factorial): n*(n-1)*(n-2)**3*2*1.
12 void	fibonacci (int n) Lists the first n terms of the fibonacci sequence 1,1,2,3,5,8,13,
7 int	gcf (int a, int b) Returns the greatest common factor of integers a, b
4 boolean	isEven (int n) Test integer n for evenness. Return true if even. Return false if odd.
13 boolean	Determines if this number is perfect (sum of proper factors = number) 6 is a Perfect number 6 = 1+2+3
5 boolean	isPrime (int n) Test integer n for prime or not prime
6 int	lcm (int a, int b) Returns the least common multiple of integers a, b)
14 void	<u>primeFactorization</u> (int n) Lists the prime factorization on integer n
9 void	primeNumberList (int n) Lists the prime numbers less than or equal to n
1 String	<u>printFactors</u> (int n) Lists the factors of an Integer n.
9 int	Forms a new number that is the reverse of this number.
16 void	<pre>pyramid(int n) * if n=4</pre>
8 int	sumDigits (int n) Calculates the sum of the digits of int n
2 int	sumInts (int n) Calculates the sum of the positive integers less than and including n: n+(n-1)+(n-2)++3+2+1.