# **Lab**

****Note# The assumption is, you have completed the pre-course work and have basic knowledge about methods, loops, variable and condition statements.****

1. Write a method called "max3" that finds the largest of THREE integers.
2. Write a method called "min3" that finds the smallest of THREE Integers.
3. Write a method called "middle3" that computes the MIDDLE value of THREE integers. Hint: for the case of three numbers, the middle is the value that is NOT the maximum NOR the minimum, so add the three values and subtract out the min and max, using the methods you wrote for problems #1 and #2.
4. Write a method called "xor" that takes two boolean values (either true or false) and returns a boolean value which is true if EITHER of the values is true BUT NOT BOTH of them. This is called the "xor" function, or "eXclusive OR" (where we are excluding the case where both values are true).
5. Write a method "isFactor" which takes two integers (k and n) and returns true if ("if and only if") k is a factor of n.
6. Write a method "isPerfect" which takes an integer and returns true if that integer is a perfect number Your method MUST call the "isFactor" method you wrote for problem #5.
7. Write a method "isPrime" which takes an integer and returns true if it is a prime number. Your method MUST call the "isFactor" method you wrote for problem #5.