Tutorial and Lab

1. Which of the following is true?
2. 11 | 4
3. 87 | 87
4. 20 | 20
5. 0 | 58
6. 11|33 ∧ 11|110 🡪 17|143
7. 19|38 🡪 19|380
8. 3|12 ∧ 3|144 🡪 3 | 144
9. Express each of the following number as a product of primes: 23, 50, 18,
10. Find the following gcd’s:
11. gcd(11,88)
12. gcd(33,77)
13. gcd(16,36)
14. gcd(22,35)
15. Find the lcm’s:
16. lcm(5,25)
17. lcm(6,4)
18. lcm(9,11)
19. Prime numbers are very important in encryption schemes. Essential to be able to verify if a number is prime or not. Please write a program in C/C++/ Java (any programing language) to test if a number entered from keyboard is a Prime no.
20. Calculate the following:

99^1021 mod 7

(97\*132) mod 13

1. Write a program in C/C++/ Java (any programing language) to ask user input two integer a, b then calculate GCD(a,b) and display the result on the screen. Then update your program Calculate M, N, which GCD(a,b)=Ma+Nb for any a,b