

16. Write a Java Program to find LCM of two given numbers using the prime factors method

Algorithm: 1. Start

2. Read input  $a$  &  $b$

3. Initialize  $lcm=1, i=1, common=1, c=1$

4. If  $(a > b)$  true then store  $c=a$  otherwise  $c=b$

5. Enter in for loop with  $i=2; i*i \leq c; i++$

6. If 5 true Enter in while loop & check

& check  $(a \% i == 0 \ \&\& \ b \% i == 0)$

7. If 6 true then  $a = a/i; b = b/i; common = common * i; c = c/i;$

8. If 6 & 5 False then calculate  $lcm = common * a * b$

9. Print  $lcm$

10. Stop

Flowchart:

