

Coding Exercise (Placement Questions) on while & do-while loop.

① WAP to check the given number is perfect number or not.

A perfect number is a positive integer that is equal to the sum of its proper divisors (excluding the number itself).

e.g. - 6 is a perfect number, 28 is perfect number

6 has proper divisor 1, 2, 3 & $1+2+3=6$

28 has proper divisor 1, 2, 4, 7, 14 & $1+2+4+7+14=28$

② WAP to find the GCD of two positive integers. (FB, Microsoft, TCS)

Input:- it should accept two positive integers.

Output:- It should print the GCD.

example:- Input:- 36 60

Output: 12

③ WAP to find the LCM (Least Common Multiple) of two positive integers (Amazon, FB, Adobe)

Hint
$$LCM(a, b) = \frac{a \times b}{GCD(a, b)}$$

④ WAP to count the total number of divisors of a given integer.

⑤ Modify your project coffee ordering system using do-while loop. It will keep asking until you enter a valid choice.