

## PROBLEM-4 FIND GCD

You are given two number. You need to calculate and print their greatest common divisor (GCD).

Show a flowchart for this process.

for this we have two approach:-

i) let  $a = 12, b = 8$

first approach

$$\begin{array}{r} 8 \overline{) 12} \quad (1 \\ - 8 \\ \hline 4 \end{array} \quad \begin{array}{r} 8 \overline{) 8} \quad (2 \\ - 8 \\ \hline 0 \end{array}$$

$$\text{gcd} = 4$$

second approach

$$12 \rightarrow 1, 2, 3, \textcircled{4}, 6, 12 \leftarrow \text{factors}$$

$$8 \rightarrow 1, 2, \textcircled{4}, 8 \leftarrow \text{find highest common factor}$$

$$\text{gcd} = 4$$

approach first

