

M. masoom Khan 24k-0001 P.F. Assign.

Q12

Flowchart

Start

Fill 3LJ

Pour water from 3LJ to 5LJ

Fill 3LJ again

Pour water from 3LJ to 5LJ

3LJ has 1L and 5LJ has 5

Empty 5LJ

Pour 1L from 3LJ into 5LJ

Fill 3LJ for last time

Pour 3LJ into 5LJ

5LJ has 4L

4L jug and bomb defused

Stop

Pseudocode

Start

Input

3L jug and 5L jug

Process

Fill 3L jug = 3

Pour 3L jug into 5L jug = 3 3L jug = 0

Fill 3L jug = 3

Pour 3L jug into 5L jug = 5 3L jug = 1

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Empty 5L jug = 0
Pour 3L jug into 5L jug = 1

Fill 3L jug = 3

Pour 3L jug into 5L jug = 4, 3L jug = 0
Output "5L jug with 4L and bomb defused"

Stop

IPO

Input	Process	Output
3L jug	Fill 3L jug pour it into 5L jug	4L in 5L jug
5L jug	Fill 3L jug pour it into 5L jug	Bomb is
infinite water	Empty 5L jug	defused
supply	Pour 1L in 3L jug into 5L jug	
	Fill 3L jug pour it into 5L jug	
	5L jug now contains 4L	

Explanation: The program helps as fill 4L in the 5L jug and defuse the bomb. This is done by using 3L jug to fully fill the 5L jug then emptying the 5L jug and pouring 1L remain in the 3L jug into the 5L jug. Finally fill the 5L jug using the 3L jug. Then 5L jug will contain 4L.