

3, Solve the water jug Problem using the following input and output.

Diagram:-



You have three jugs. They can hold 12 liters, 8 liters and 5 liters, respectively. Your 12 liter jug is full of water.

How can you split up with water to give away exactly 6 liters, and keep 6 liters?

Solution:-

the given  $\Rightarrow (12, 0, 0)$

the output  $\Rightarrow (6, 6, 0)$

the solution is:-

①  $\Rightarrow$   $\rightarrow$  Pour from 12 into 8 L.

②  $\Rightarrow$   $\rightarrow$  Pour from 8 into 5 L.



$\rightarrow$  Pour 5 into 12 L.



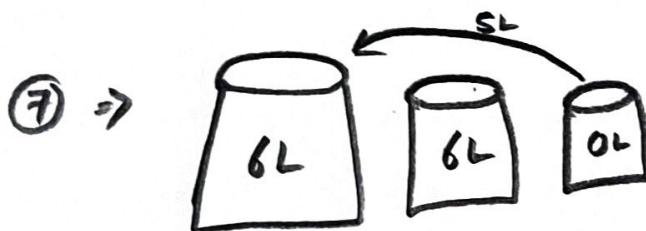
$\rightarrow$  Pour 8 into 5 L.



$\rightarrow$  Pour from 12 into 8 L.



$\rightarrow$  Pour from 8 into 5 L.



$\rightarrow$  Pour from 5 into 12 L

$\therefore$  The final answer is  $(6, 6, 0)$