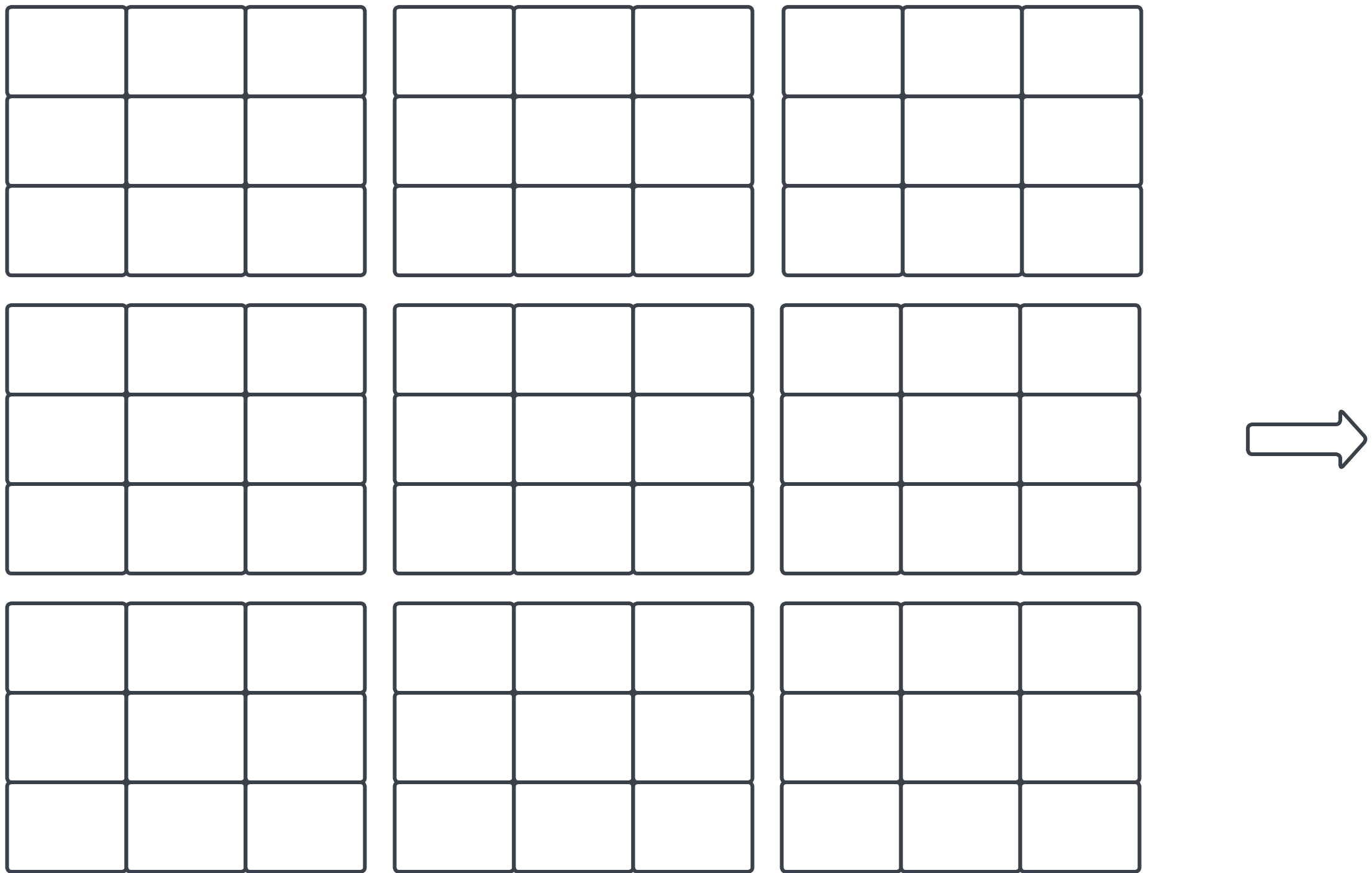


Valid Sudoku



Define Dictionary:

$\text{Row}[x] = \left\{ \begin{array}{l} \text{Set of all cell} \\ \text{values in row } x \end{array} \right\}$

$\text{Col}[y] = \left\{ \begin{array}{l} \text{Set of all cell values} \\ \text{in column } y \end{array} \right\}$

$\text{Subgrid}[(x//3, y//3)] = \left\{ \begin{array}{l} \text{Set of all cell values} \\ \text{in subgrid } (x//3, y//3) \end{array} \right\}$

If value z of cell (x,y) in
Row $[x]$ or
Col $[y]$ or
Subgrid $[(x//3, y//3)]$

Return False

Else

append z to
Row $[x]$ and
Col $[y]$ and
Subgrid $[(x//3, y//3)]$

If all cells pass

Return True

