

SPACE COMPLEXITY

IntGrid2D:

3x3 space $\rightarrow [(3 \times 3) \times 2] + [(3 \times 3) \times 2]$

\swarrow char-grid[]
 \searrow point-grid[][] \rightarrow IntPoint2D for each point-grid[][]

$$[(4 \times 4) \times 2] + [(4 \times 4) \times 2]$$

\downarrow

$$[(n \times n) \times 2] + [(n \times n) \times 2]$$

\downarrow

$$2n^2 + 2n^2$$

\downarrow

$$4n^2$$

\Downarrow

$$\boxed{O(n^2)}$$

The space complexity for my IntGrid2D is quadratic.