To compute JCF of A.

- For each eigenvalue λ:
  - Let m be the multiplicity of λ
  - Compute $\dim \ker (A-\lambda I)^k$ = # of zero rows of $\text{rref}(A-\lambda I)^k$

    δ_1 = # of towers = # of chains

    Tallest tower has height of the smallest k such that $\delta_k = m$

    $\delta_k - \delta_{k-1}$ = # of blocks at height k.
  - Sketch the blocks and write down B in JCF
  - Number the blocks from left to right, bottom to top.

Example: $\lambda=2$ has multiplicity 4, $\delta_1=2, \delta_2=3, \delta_3=4$

$\lambda=5$ has multiplicity 3, $\delta_1=1, \delta_2=2, \delta_3=3$.



$\lambda=2$



$\lambda=5$

$$B = \begin{bmatrix} 2 & 1 & 0 & & & & \\ 0 & 2 & 1 & & & & \\ 0 & 0 & 2 & & & & \\ & & & 2 & & & \\ & & & & 5 & 1 & 0 \\ & & & & 0 & 5 & 1 \\ & & & & 0 & 0 & 5 \end{bmatrix}$$