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A diagram illustrating a grid structure, likely representing a matrix or a set of data points. The grid is defined by solid red lines for columns and dashed blue lines for rows. The columns are labeled at the top with  $b_0, b_1, b_2, \dots, b_{n-1}, b_n$ . The rows are labeled on the left with  $a_1, a_2, \vdots, a_m$ . The grid is divided into cells by these lines. In the cell corresponding to row  $a_2$  and column  $b_3$  (the first cell after the first three columns), there are three red dots arranged horizontally. In the cell corresponding to row  $a_2$  and column  $b_2$ , there are three blue dots arranged vertically.

X

⋮

$$y_{m \times 1}$$

(Observations)

$$A_{m \times n}$$

$$(m \ll n)$$

$$\begin{array}{c} x_{n \times 1} \\ (K-sparse) \end{array}$$