P_0: obtains punctured matrix
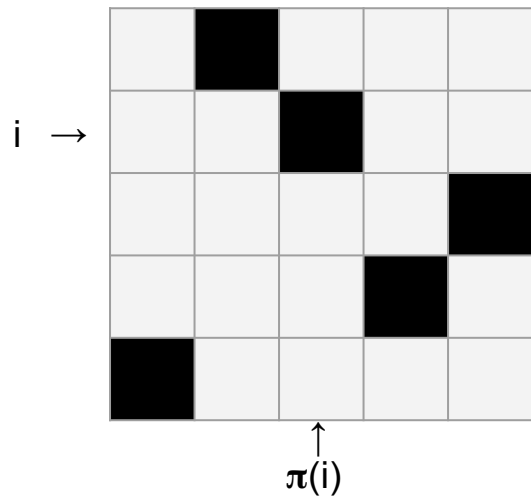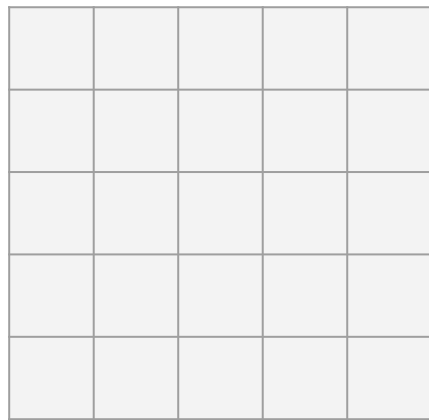

i →

π(i)

Δ[i] is set as XOR of elements
of row i and column π(i).

P_1: obtains full matrix

Each a[i] is set as XOR of elements of column i
Each b[j] is set as XOR of elements of row j