Exercise: Big matrix-vector multiplication

How to multiply a large matrix A of size ($n \times n$) by a vector v of size n.
The goal is to calculate:

$$Av=x$$

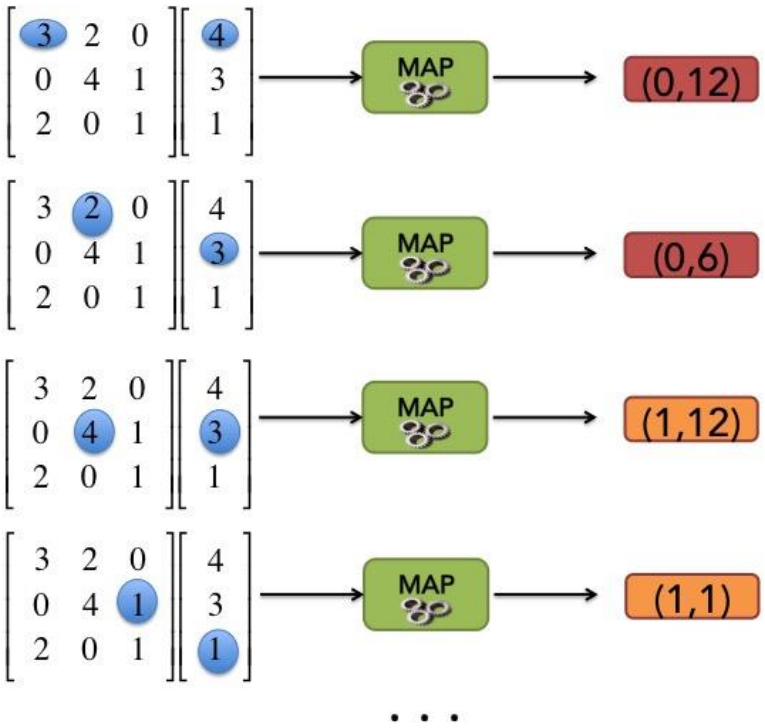
with

$$x=(x_1,\ldots,x_n)$$

and

$$x_i=\sum a_{ij}\, v_j$$

MAP :



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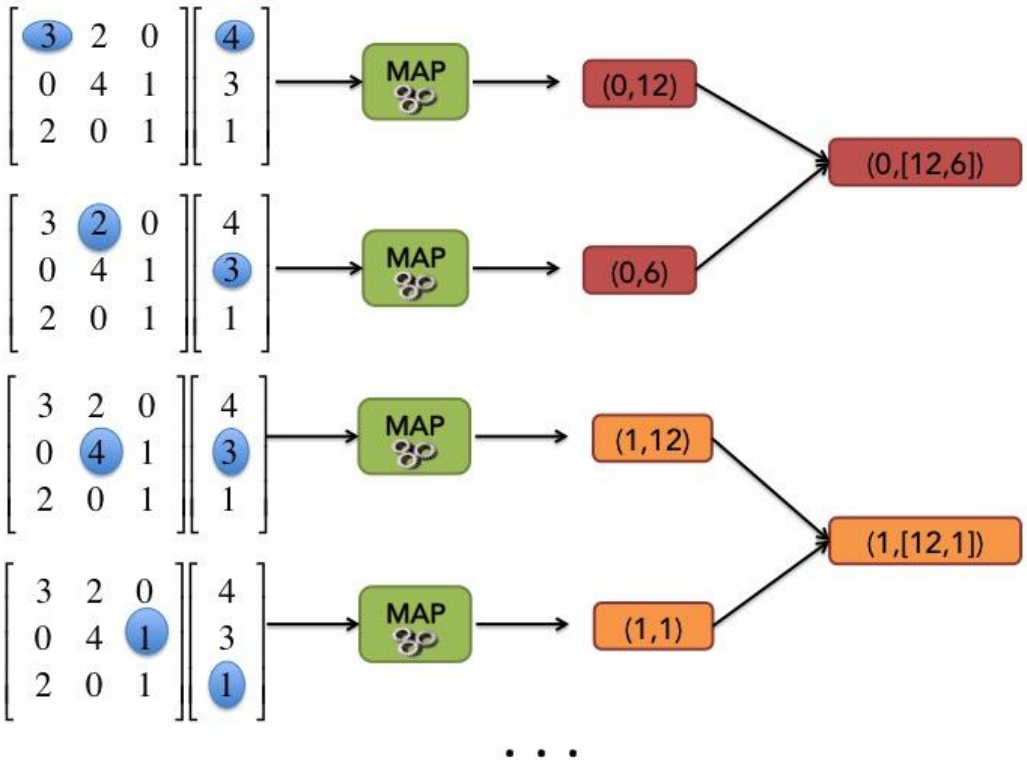
Shuffling :



Exercise: Big matrix-vector multiplication

How to multiply a large matrix *A* of size (*n*×*n*) by a vector *v* of size *n*.
The goal is to calculate:

$$Av=x$$

with

$$x=(x_1,\ldots,x_n)$$

and

$$x_i=\sum a_{ij}\, v_j$$

Reduce :