For Row order: Each process takes up a page frame

Processes are loaded P1 , P2. P3 ….. Pn-1, Pn

Code	Stack	P1	P2	P3	P4	P5	P6	P7	P8
Code	Stack	P9	P2	P3	P4	P5	P6	P7	P8
Code	Stack	P9	P10	P3	P4	P5	P6	P7	P8

…

Code	Stack	Pn-7	Pn-6	Pn-5	Pn-4	Pn-3	Pn-2	Pn-1	Pn

Every process creates a page fault. Using LRU the least recently used process is replaced

Using Column order: Each process is 5 pages long

The process are loader P1 X5, P2 X5, P3 X5… PN X5

Code	Stack	P1	P2	P3	P4	P5	P6	P7	P8
Code	Stack	P9	P2	P3	P4	P5	P6	P7	P8
Code	Stack	P9	P10	P3	P4	P5	P6	P7	P8

…

Code	Stack	PN-7	PN-6	PN-5	PN-4	PN-3	PN-2	PN-1	PN

Since we load the processes linearly, not every process will create a page fault. For instance, loading P1, P1, P1, P1, P1, P2 will only create 2 page faults.

We use LRU to replace the processes in memory. With the data we use, $N < n$ and $n = 5*N$.