

# Belady's Algorithm

Belady's Algorithm is known (proven) to be the optimal page replacement algorithm

- Problem : it is hard (impossible) to predict the future
- ➔ Belady's algorithm is useful to compare page replacement algorithms with the optimal to gauge room for improvement

# LRU - Last Recently Used

➔ Evict the page that has not been used for the longest time in the past

Access	Hit/Miss	Evict	P0	P1	P2	P3
1	Miss		1			
2	Miss		1	2		
3	Miss		1	2	3	
4	Miss		1	2	3	4
1	Hit		1	2	3	4
2	Hit		1	2	3	4
5	Miss	3	1	2	5	4
1	Hit		1	2	5	4
2	Hit		1	2	5	4
3	Miss	4	1	2	5	3
4	Miss	5	1	2	4	3
5	Miss	1	5	2	4	3

● Total 8 misses