

Page Replacement Algorithms

The goal of the replacement algorithm is to reduce the fault rate by selecting the best victim page to remove

- **FIFO - First In, First Out**
evict the oldest page in the system
- **LRU - Last Recently Used**
evict the page that has not been used for the longest time in the past
- **Second Chance**
an approximation of LRU (more implementable)

➔ Replacement algorithms are evaluated on a reference string by counting the number of page faults

FIFO - First In, First Out (with 3 physical pages)

➡ Evict the oldest page in the system

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

● Total 9 misses