Page Replacement Algorithm

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Process <--> Memory

Page Fault

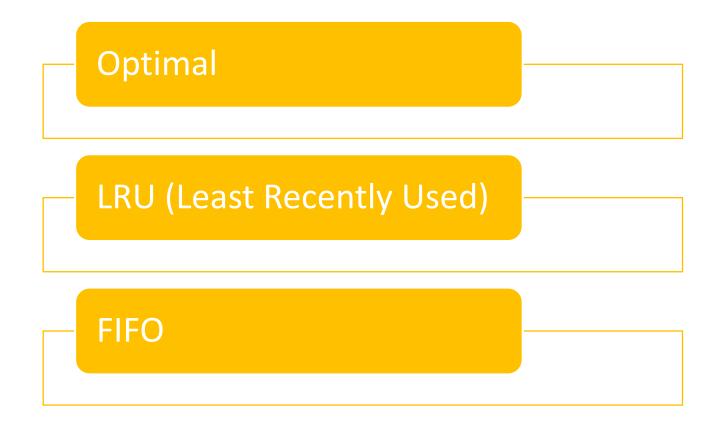
When the process access a page that is not in the memeory

Page Replacement t Algorithm

When page fault occurs system needs to find free frame to swap

When there is no free frame left, then the system will use page replacement algorithm

3 Page Replacement Algorithm



Optimal

```
page.append(FREE)
    for q in range(m):
            faulted = True
                        if ii > max future:
```

```
faulted = True
       new_slot = max_future_q
    page_faults += 1
    page[new_slot] = Number[i]
    print("\n%d ->" % (Number[i]))
    for j in range(m):
       if page[j] != FREE:
           print(page[j])
        else:
           print("-")
else:
   print("\n%d -> No Page Fault" % (Number[i]))
print("\n Total page faults : %d." % (page_faults - 3))
```

LRU

```
Number = [int(x) for x in input('Number: ')]
n = len(Number)
m = int(input("Number of Frame: "))
page_faults = 0
page = []
    flag = 0
```

FIFO

```
Number = [int(x) for x in input('Number: ')]
n = len(Number)
m = int(input("Number of Frame: "))
f = -1
page faults = 0
page = []
for i in range(m):
    page.append(-1)
    flag = 0
        if page[j] == Number[i]:
            flag = 1
    if flag == 0:
        f = (f + 1) % m
        page[f] = Number[i]
        page_faults += 1
        print("\n%d ->" % (Number[i]))
            if page[j] != -1:
                print(page[j])
        print("\n%d -> No Page Fault" % (Number[i]))
    print("\n Total page faults : %d." % (page_faults - 3))
```