

# OS LAB MANUAL (CS23431)

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EX.NO:11(A)

## FIFO PAGE REPLACEMENT

Aim: To find out the number of page faults that occur using First-in First-out (FIFO) page replacement technique

```
Program: from collections
import deque
ref_str = []
frames = deque() page_faults = 0 n =
int(input("Enter the size of reference string: "))
for i in range(n):
    val = int(input(f"Enter [{i + 1}] : "))
    ref_str.append(val)
    frame_size = int(input("Enter
page frame size : "))
    print()
    for page in ref_str:
        if page not in frames:
            if len(frames) < frame_size:
                frames.append(page)
            else:
                frames.popleft()
                frames.append(page)
            page_faults += 1
    print(f"{page} ->", end=' ')
    for f in frames: print(f,
end=' ')

for _ in range(frame_size - len(frames)):
    print("-", end=' ')
```

```
        print()
    else:
        print(f"{page}    ->    No    Page    Fault")
print(f"\nTotal page faults: {page_faults}")
```

Input:

```
Enter the size of reference string: 4
Enter [1] : 6
Enter [2] : 8
Enter [3] : 7
Enter [4] : 3
Enter page frame size: 2
```

Output:

```
6 -> 6 -
8 -> 6 8
7 -> 8 7
3 -> 7 3

Total page faults: 4
```