

Ex. No.: 11 b

Date: 7.5.24

### LRU

#### Aim:

To write a c program to implement LRU page replacement algorithm.

#### Algorithm:

- 1: Start the process
- 2: Declare the size
- 3: Get the number of pages to be inserted
- 4: Get the value
- 5: Declare counter and stack
- 6: Select the least recently used page by counter value
- 7: Stack them according the selection.
- 8: Display the values
- 9: Stop the process

#### Program Code:

```
#include <stdio.h>
int AndLRU( int time[], int n) {
    int i, minimum = time[0], pos = 0;
    for (i=1 ; i<n ; i++) {
        if (time[i] < minimum) {
            minimum = time[i];
            pos = i;
        }
    }
    return pos;
}
```

```

int main()
{
    int no-of-frames, no-of-pages, frames[10],
        pages[30], counter = 0, time[10], flag1,
        flag2, i, j, pos, faults = 0;
    printf("Enter no. of frames");
    scanf("%d", &no-of-frames);
    printf("Enter no. of pages");
    scanf("%d", &no-of-pages);
    printf("Enter reference string");
    for (i=0; i<no-of-pages; i++) {
        scanf("%d", &pages[i]);
    }
    for (i=0; i<no-of-frames; i++) {
        frames[i] = -1;
    }
}
return;

```

Output Enter no. of frames : 3

Enter no. of pages : 6

Enter reference string : 575673

5 -1 -1

5 7 -1

5 7 -1

5 7 6

5 7 6

3 7 6

Total page faults = 4

Result: The above commands are executed successfully

Q1 May 2018