*Documentation*

*Assignment 5 :*

**PAGE TABLE:**
int pg_table[VIRTUAL_ADDR_SPACE] //  VIRTUAL_ADDR_SPACE = 64
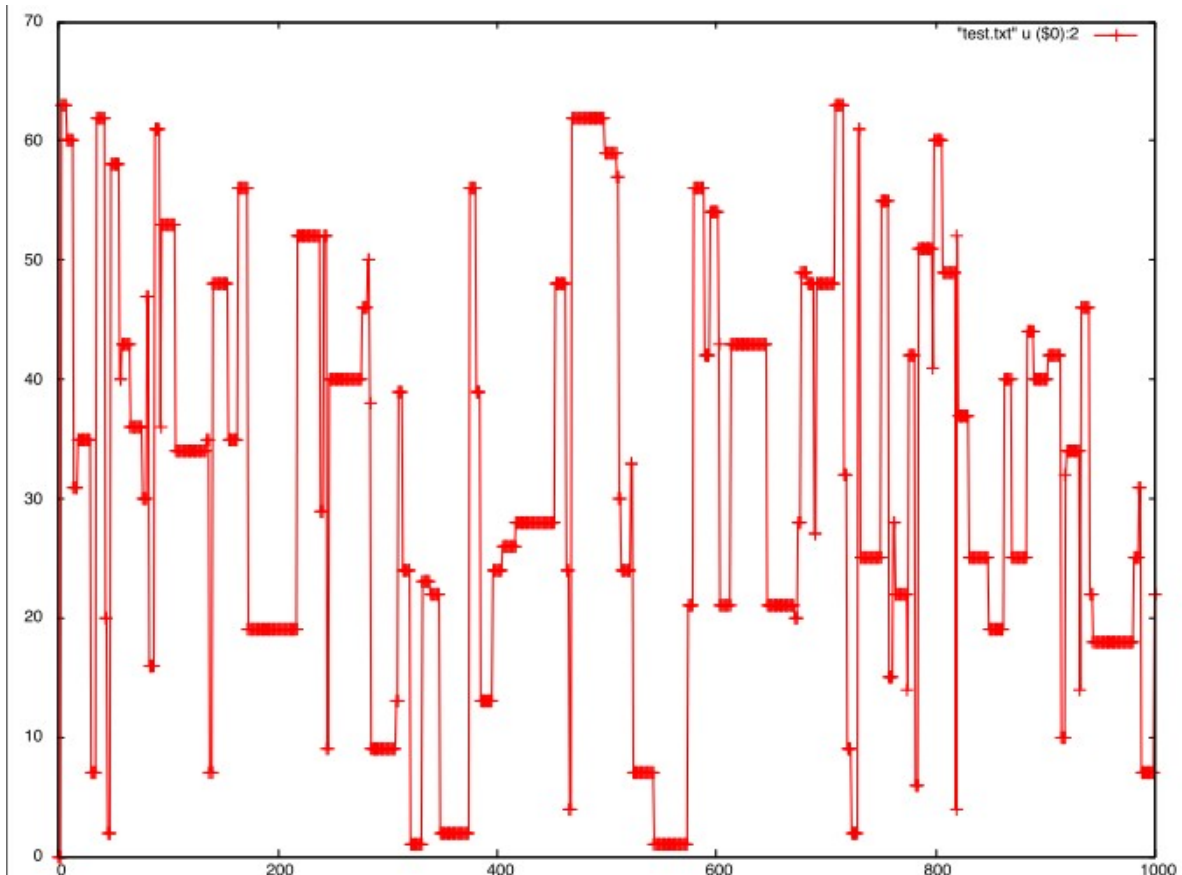
**Main Functions :**
fifo_case()
random_case()
lru_case()
nru_case()
second_chance()

**DATA Structures to maintain the queue :**
**queue<int> pages_loaded**;   // for fifo
**list<int> lru_list**;              // for lru
**list<int> rand_list**;            // for random selection
**list<int> nru_list**;             // for NRU
**vector<int> sec_vec**;          //for second chance replacement algo

## LOCALITY OF REFERENCE!!!!



**Obtained Statistics :**

**FIFO** :

```
<-------------------PAGE STATISTICS------------------->
Memory References :     1000000
Page in :        118800
Page out :       104514
<--------------PAGE TABLE--------------------->
PG       Frame
1        1
3        5
5        4
24       0
32       3
36       2
37       6
39       7
```

**Random Case :**

```
<-------------------PAGE STATISTICS------------------->
Memory References :     1000000
Page in :        132387
Page out :       103794
<--------------PAGE TABLE--------------------->
PG       Frame
3        7
5        0
24       5
36       3
37       1
39       2
40       6
46       4
```

**LRU:**

```
<-----------------PAGE STATISTICS------------------->
Memory References :     1000000
Page in :         110926
Page out :        88143
<-------------PAGE TABLE-------------------->
PG       Frame
3        4
5        5
24       7
36       3
37       0
39       1
40       6
46       2
```

**NRU** :

```
<-----------------PAGE STATISTICS------------------->
Memory References :     1000000
Page in :         110926
Page out :        88143
<-------------PAGE TABLE-------------------->
PG       Frame
3        4
5        5
24       7
36       3
37       0
39       1
40       6
46       2
```

**Second chance :**

```
<-----------------PAGE STATISTICS------------------->
Memory References :     1000000
Page in :         132387
Page out :        103794
<-------------PAGE TABLE-------------------->
PG       Frame
3        7
5        0
24       5
36       3
37       1
39       2
40       6
46       4
```