Nama : Andri Firman Saputra  
NIM : 201011402125  
Kelas : 04TPLP016  
Tugas : Sistem Operasi – UAS

1. Sistem operasi jaringan adalah sistem operasi yang khusus untuk menangani jaringan, di mana sistem operasi tersebut memiliki banyak layanan untuk kebutuhan jaringan.

Sistem operasi mobile adalah sistem operasi yang khusus untuk telepon seluler, sama seperti sistem operasi pada umumnya hanya saja lebih sederhana.

Sistem operasi adalah perangkat lunak untuk sistem yang mengatur sumber daya dari perangkat keras dan menjalankan program perangkat lunak.

1. Reference string: 7 2 1 0 3 2 4 5 6 2 0 1 2 3 0 2 3 4 5 4 3 2 4 2 3
   1. Algoritma OPT (Optimal)

* Page fault: 13
* Hit: 12

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| f |  | 7 | 2 | 1 | 0 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 2 | 2 | 2 | 2 |
| f |  |  | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| f |  |  |  | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

* 1. Algoritma FIFO (First In First Out)
* Page Fault: 19
* Hit: 6

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| f |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 0 | 1 | 1 | 3 | 3 | 2 | 2 | 4 | 5 | 5 | 3 | 2 | 4 | 4 | 4 |
| f |  |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 0 | 0 | 1 | 1 | 3 | 3 | 2 | 4 | 4 | 5 | 3 | 2 | 2 | 2 |
| f |  |  |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 2 | 0 | 0 | 1 | 1 | 3 | 2 | 2 | 4 | 5 | 3 | 3 | 3 |

c. Algoritma LRU (Least Recently Used)

* Page Fault: 17
* Hit: 8

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| f |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 0 | 1 | 2 | 3 | 0 | 2 | 3 | 4 | 5 | 4 | 3 | 2 | 4 | 2 | 3 |
| f |  |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 0 | 1 | 2 | 3 | 0 | 2 | 3 | 4 | 5 | 4 | 3 | 2 | 4 | 2 |
| f |  |  |  | 7 | 2 | 1 | 0 | 3 | 2 | 4 | 5 | 6 | 2 | 0 | 1 | 2 | 3 | 0 | 2 | 3 | 3 | 5 | 4 | 3 | 3 | 4 |

Dari ketiga algoritma di atas, menurut saya yang paling efektif ada algoritma OPT (Optimal) karena paling sedikit Page Fault.

1. Kunci publik (n,e) = (255,7)

Kunci rahasia (n,d) = (255,343)

Isi File: UNPAM

Hasil Enkripsi:

886284072365017003424773041526462711090566726636159524681413580978894773596953125

Hasil Deskripsi: UNPAM

1. Mekanisme Interupsi

* Saat suatu modul telah selesai menjalankan tugasnya dan siap menerima tugas berikutnya maka, modul ini akan mengirimkan permintaan interupsi ke prosesor
* Prosesor akan menghentikan eksekusi yang dijalankannya untuk menghandel routine interupsi
* Setelah program interupsi selesai maka, prosesor akan melanjutkan eksekusi programnya kembali
* Saat sinyal interupsi diterima prosesor ada dua kemungkinan tindakan, yaitu: interupsi diterima dan interupsi ditolak