Config File

```
# System setup
LAS=4GB
PAS=1GB
PAGESIZE=128B
# Process setup
PROCESS_NAME=P0
PROCESS_SIZE=7300B
PROCESS_MEMREF=898,100,150,260,127,400,110,515,180,420,120,425,256,175,270
ALGORITHM=LIFO
PAGE_FRAMES=4
```

```
struct nodo{
    int valor;
    int aux; //Usada para LRU y FIFO
    int aux_optimal; // Usada para Optimal
} * nodos;
```

Limpiador y analizador de linea

System Setup

Process Setup

Conversores

```
struct system_setup{
    char* las;
    int las_valor;
    int las_unidad;
    int las_convertido;
    char* pas;
    int pas_valor;
    int pas_unidad;
    int pas_convertido;
    char* page_size;
    int page_size_valor;
    int page_size_unidad;
    int page_size_convertido;
}sistema;
```

```
struct process_setup{
    char* nombre;
    char* size;
    int size_valor;
    int size_unidad;
    int *mem_ref;
    int *ref_string;
    int ref_string_size;
    char *algoritmo;
    int algoritmo_codigo;
    int page_frames;
}proceso;
```

Valores Originales

Parte Entera

Exponente en Base 10 de la Unidad

Conversion a exponete de Base 2

Calculos

Errores

Calculos

Valores Originales

Parte Entera

Exponente en Base 10 de la Unidad

Arreglo de memoria y conversion

Algoritmos de Reemplazo

Almacenar registro cada t

Sumarizar y presentar

```
osw@osw-VirtualBox:~/Proyecto-Operativos-Final$ ./Parte_1_Simulador/bin/simulad
or ./Parte_1_Simulador/files/config_file_1
===== Resultados =====

1.- Logical address structure: page bits and offset bits.
   Page bits = 25       Offset bits = 7

2.- Physical address structure: frame bits and offset bits.
   Page bits = 23       Offset bits = 7

3.- Max number of Page Table Entries (PTE).
   PTE size = 4B       MAX number of PTE = 32

4.- Max number of Frames.
   Frame size = Page Size = 128b      MAX number of Frames = 7812500
```

```
6.- Number of pages marked as valid for the process)
   Pages Valid = 7300b/128b = 57

7.- Reference string based on the address sequence)
    Mem Ref:  898   100   150   260   127
              400   110   515   180   420
              120   425   256   175   270

    Reference String:  7   0   1   2   0
                       3   0   4   1   3
                       0   3   2   1   2


8.- Show the output (table) of the page-replacement algorithm)

Algorithm: optimal
Ref Str: | 7 | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 1 | 3 | 0 | 3 | 2 | 1 | 2 |
Frame
   0 :   | 7 | 7 | 7 | 7 | 7 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
   1 :   | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
   2 :   | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
   3 :   | - | - | - | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 |

   R :   | M | M | M | M | H | M | H | M | H | H | H | H | M | H | H |

9.- Summarise number of hits and page fault
   Hit = 8       Miss = 7
```