

Lab 8 - (Paging Simulator)

README

Best to just plug into PyCharm and run for ease of use, but can be run as a general script.

Simple Menu

```
C:\Users\GregV\AppData\Local\Programs\Python\Python38-32\python.exe "C:/Users/GregV/PycharmProjects/Paging Simulator/main.py"
Initializing Memory File!
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
```

[0] Load Program / [2] Dump

```
C:\Users\GregV\AppData\Local\Programs\Python\Python38-32\python.exe "C:/Users/GregV/PycharmProjects/Paging S:
Initializing Memory File!
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
0
Number of Pages in exe?500
Saving Memory File!
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
2
Total Memory: 524288
Frame Sizes: 512
Number of Frames: 1024
Frame #: 0
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
Frame #: 1
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
Frame #: 2
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
```

[1] Initialize / [2] Dump

```
What would you like to do?
```

```
[0] Load Program
```

```
[1] Initialize
```

```
[2] Dump
```

```
[3] Reset
```

```
[4] Free Program
```

```
[5] List Program
```

```
[6] Exit
```

```
1
```

```
Initializing Memory File!
```

```
What would you like to do?
```

```
[0] Load Program
```

```
[1] Initialize
```

```
[2] Dump
```

```
[3] Reset
```

```
[4] Free Program
```

```
[5] List Program
```

```
[6] Exit
```

```
2
```

```
Total Memory: 524288
```

```
Frame Sizes: 512
```

```
Number of Frames: 1024
```

[3] Reset / [2] Dump

What would you like to do?

[0] Load Program

[1] Initialize

[2] Dump

[3] Reset

[4] Free Program

[5] List Program

[6] Exit

3

Initializing Memory File!

What would you like to do?

[0] Load Program

[1] Initialize

[2] Dump

[3] Reset

[4] Free Program

[5] List Program

[6] Exit

2

Total Memory: 524288

Frame Sizes: 512

Number of Frames: 1024

[4] Free Program / [0] Load

```
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
0
Number of Pages in exe?52
Saving Memory File!
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
4
Enter program to free: Program 1
```

[5] List Program / [0] Load

```
Number of Pages in exe?500
Saving Memory File!
What would you like to do?
[0] Load Program
[1] Initialize
[2] Dump
[3] Reset
[4] Free Program
[5] List Program
[6] Exit
2
Total Memory: 524288
Frame Sizes: 512
Number of Frames: 1024
Frame #: 0
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
Frame #: 1
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
Frame #: 2
512 bytes
Status: Occupied
Program Holding Frame: Program 1
None
```

[6] Exit

```
What would you like to do?  
[0] Load Program  
[1] Initialize  
[2] Dump  
[3] Reset  
[4] Free Program  
[5] List Program  
[6] Exit  
6  
Saving Memory File!  
  
Process finished with exit code 0
```

Memory.txt

```
1 524288
2 512
3 1024
4 -102
5 {'Program 1': <Classes.Program object at 0x032CE1A8>, 'Program 2
6 0 512 False Program 2
7 1 512 False Program 2
8 2 512 False Program 2
9 3 512 False Program 2
10 4 512 False Program 2
11 5 512 False Program 2
12 6 512 False Program 2
13 7 512 False Program 2
14 8 512 False Program 2
15 9 512 False Program 2
16 10 512 False Program 2
17 11 512 False Program 2
18 12 512 False Program 2
19 13 512 False Program 2
20 14 512 False Program 2
21 15 512 False Program 2
22 16 512 False Program 2
23 17 512 False Program 2
24 18 512 False Program 2
25 19 512 False Program 2
26 20 512 False Program 2
27 21 512 False Program 2
28 22 512 False Program 2
29 23 512 False Program 2
30 24 512 False Program 2
31 25 512 False Program 2
32 26 512 False Program 2
33 27 512 False Program 2
34 28 512 False Program 2
35 29 512 False Program 2
36 30 512 False Program 2
37 31 512 False Program 2
38 32 512 False Program 2
39 33 512 False Program 2
```