

Assignment 5

Disclaimer: Submit your assignment in the form of a .pdf file which contains solutions to your tasks
Deadline: Monday, April 22nd, 2024.

1) Explain the output

Time	PID: 0	PID: 1	PID: 2	PID: 3	PID: 4	PID: 5	CPU
1	RUN:cpu	READY	READY	READY	READY	READY	1
2	RUN:cpu	READY	READY	READY	READY	READY	1
3	RUN:cpu	READY	READY	READY	READY	READY	1
4	RUN:cpu	READY	READY	READY	READY	READY	1
5	DONE	RUN:cpu	READY	READY	READY	READY	1
6	DONE	RUN:cpu	READY	READY	READY	READY	1
7	DONE	RUN:cpu	READY	READY	READY	READY	1
8	DONE	RUN:cpu	READY	READY	READY	READY	1
9	DONE	DONE	RUN:cpu	READY	READY	READY	1
10	DONE	DONE	RUN:cpu	READY	READY	READY	1
11	DONE	DONE	RUN:cpu	READY	READY	READY	1
12	DONE	DONE	RUN:cpu	READY	READY	READY	1
13	DONE	DONE	DONE	RUN:cpu	READY	READY	1
14	DONE	DONE	DONE	RUN:cpu	READY	READY	1
15	DONE	DONE	DONE	RUN:cpu	READY	READY	1
16	DONE	DONE	DONE	RUN:cpu	READY	READY	1
17	DONE	DONE	DONE	DONE	RUN:cpu	READY	1
18	DONE	DONE	DONE	DONE	RUN:cpu	READY	1
19	DONE	DONE	DONE	DONE	RUN:cpu	READY	1
20	DONE	DONE	DONE	DONE	RUN:cpu	READY	1
21	DONE	DONE	DONE	DONE	DONE	RUN:cpu	1
22	DONE	DONE	DONE	DONE	DONE	RUN:cpu	1
23	DONE	DONE	DONE	DONE	DONE	RUN:cpu	1
24	DONE	DONE	DONE	DONE	DONE	RUN:cpu	1

2) In a 16-bit system, where the page size is of 4KB, convert the virtual addresses into the physical address and check if the page an address is mapped to is valid or not.

Virtual address trace:

VA 0x00001577

VA 0x000022c5

VA 0x000014fa

VA 0x00002d6e

VA 0x000007d6

Page table:

0	0x00000000
1	0x00000000

2	0x80000008
3	0x00000000

- 3) In a 16-bit system, where the page size is of 4KB, convert the virtual addresses into the physical address and check if the page an address is mapped to is valid or not.

Virtual address trace:

VA 0x000004a1

VA 0x000000b4

VA 0x0000122a

VA 0x00000788

VA 0x000013e8

Page table:

0	0x00000000
1	0x00000000
2	0x00000000
3	0x00000000