⇒ Memory features of xv6

1] Total 128 MB RAM is hardcoired

2] main memory (RAM) is shared

3] CPU = core = HART

⇒ following is device mangement in xv6

1] UART (Used for taking data from keyboard)

2] DISK

(UART & DISK) are controlled by each other. By one up, they are shared between 1 up (core)

3] PLIC (Platform Level Interrupt Controller)

Handles the interrupt & depides which core should be interrupted

4] CLINT (Core local Interrupt controller)

⇒ Memory Management in xv6

1] Page size is of 4096 bytes

2] There is free list :- whenever page is required by kernel it is allocated from freelist

3] There is no variable sized allocation in malloc

4] There are 3 levels of page table

5] There is one table per process & one table for kernel

6] Pages can be marked as R/W/X/U/V

⇒ Scheduler in xv6

1] Round Robin

2] Timeslice is fixed 100ok cycles

3] All cores share 1 ready Queue & next turn can be of any core.

⇒ Boot Sequence.

⇒ Locking.

Spin locks()

sleep()

wakeup()

⇒ "PARAM.H"

→ has fixed number of processes & opens files (All defined in)

FIXED LIMITS

→ kill(pid)

⇒