CMP 321

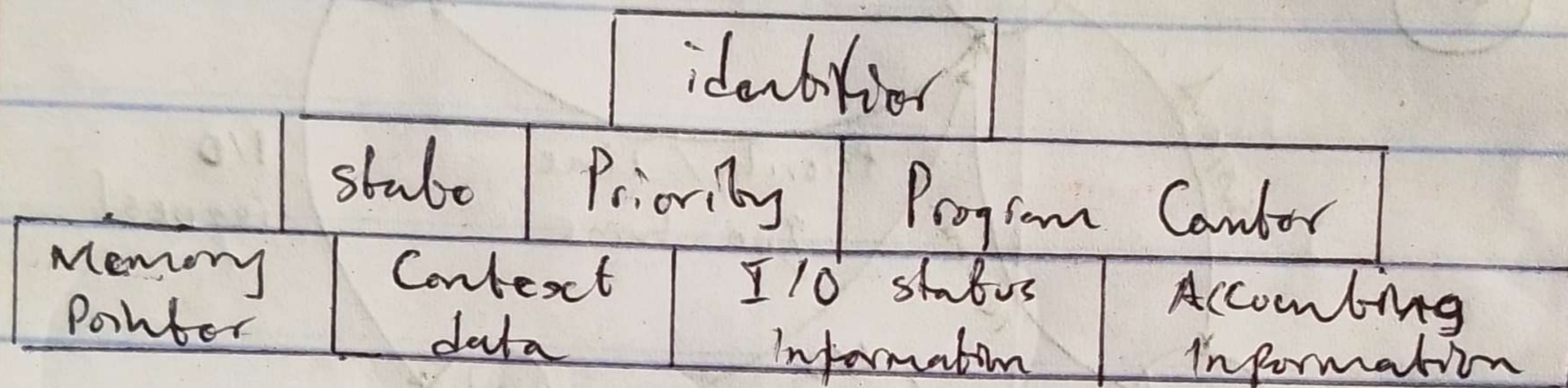## PRACTICE DIAGRAMS

300LVL 1ST SEMESTER

CMP 321 - Diagram Practice
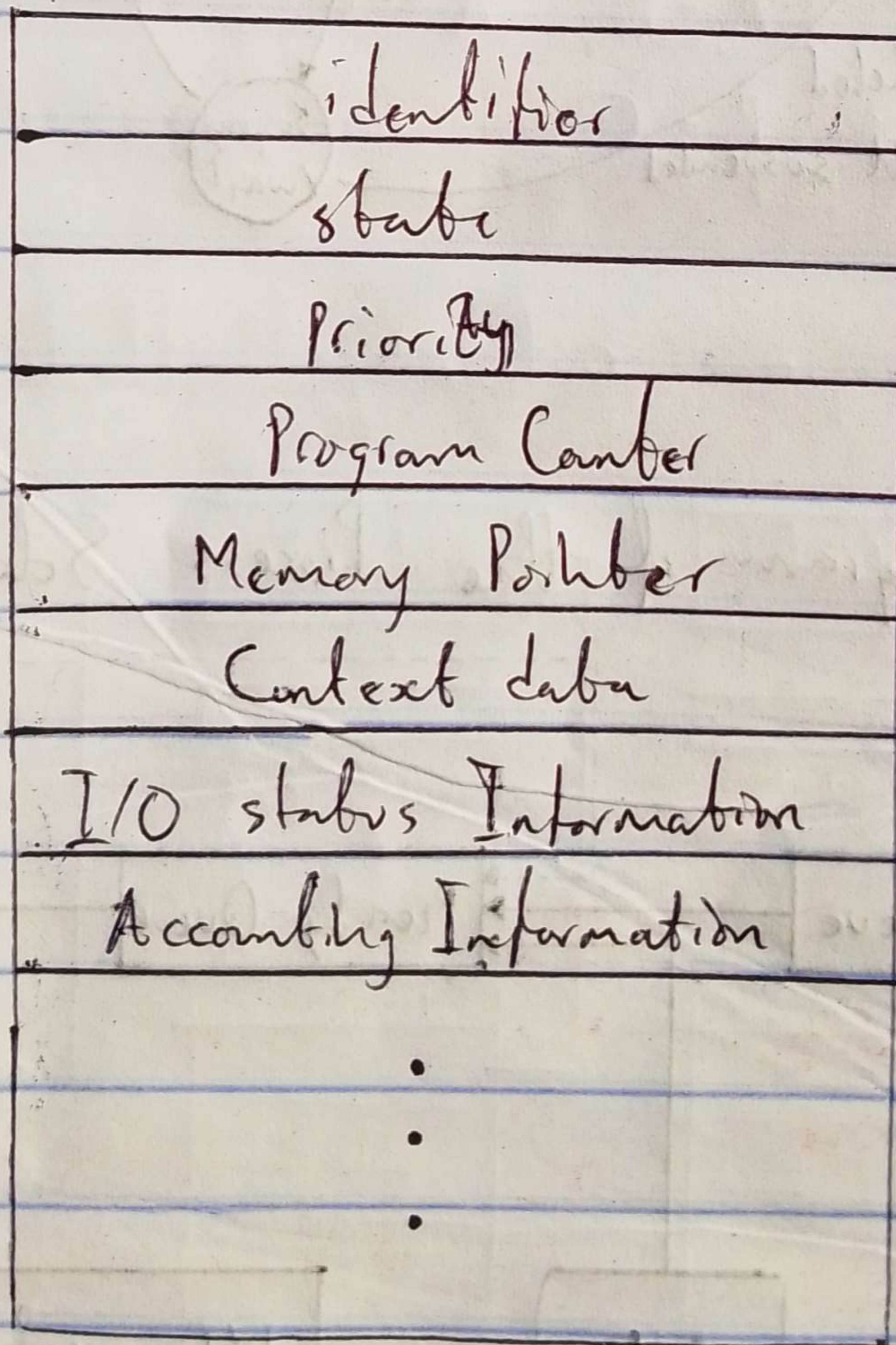
<u>1</u> a Draw a diagram Combining the elements that uniquely ident ~~-ifies dimensions of elements~~ -ifies a process?
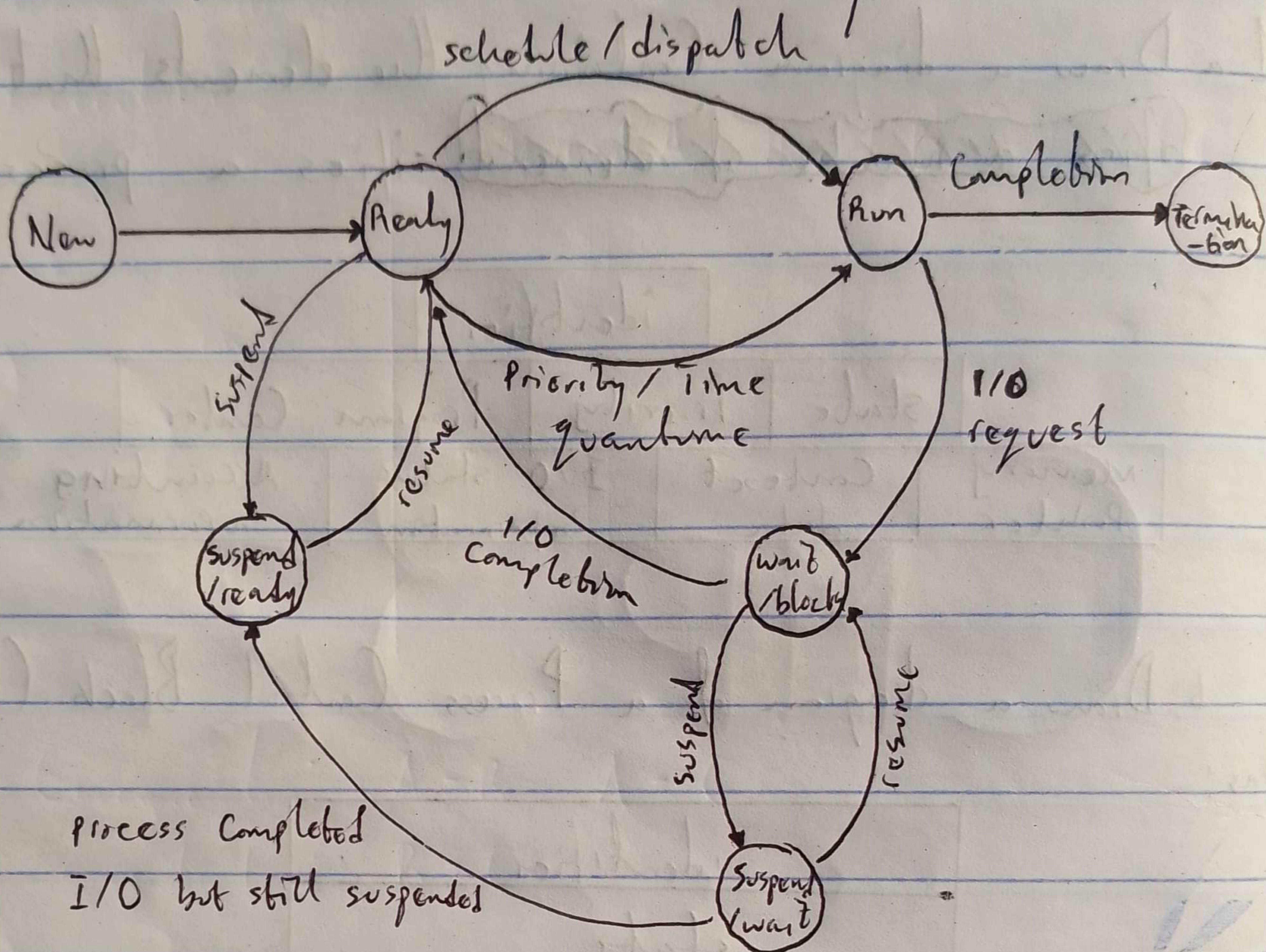
Ans:

	identifier		
	state	Priority	Program Counter
Memory Pointer	Context data	I/O status Information	Accounting Information

b Draw a diagram of a Process Control Block (PCB)?

Ans:

identifier
state
Priority
Program Counter
Memory Pointer
Context data
I/O status Information
Accounting Information
.
.
.

c Draw the Process State Diagram?

Ans.

schedule / dispatch

New → Ready

Ready → Run

Run → Completion → Termination

suspend

resume

Suspend /ready

Priority / Time quantume

I/O request

I/O Completion

wait /block

suspend

resume

Suspend /wait

process Completed
I/O but still suspended

d Draw a diagram of the Process Scheduling Queue

Ans:

Job Queue → Ready Queue → CPU

I/O

I/O working Queue
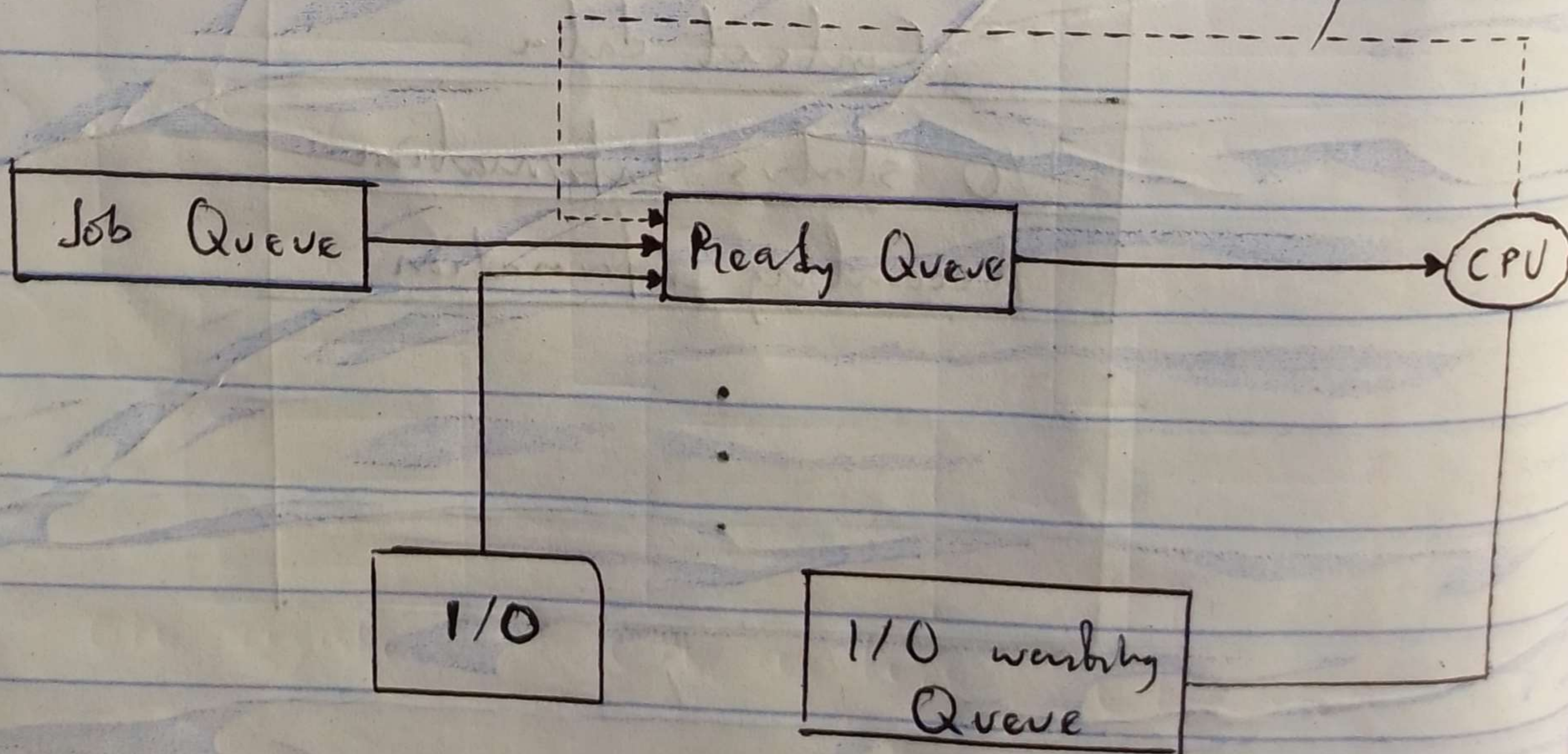
d Draw a Table Comparing schedulers

Ans

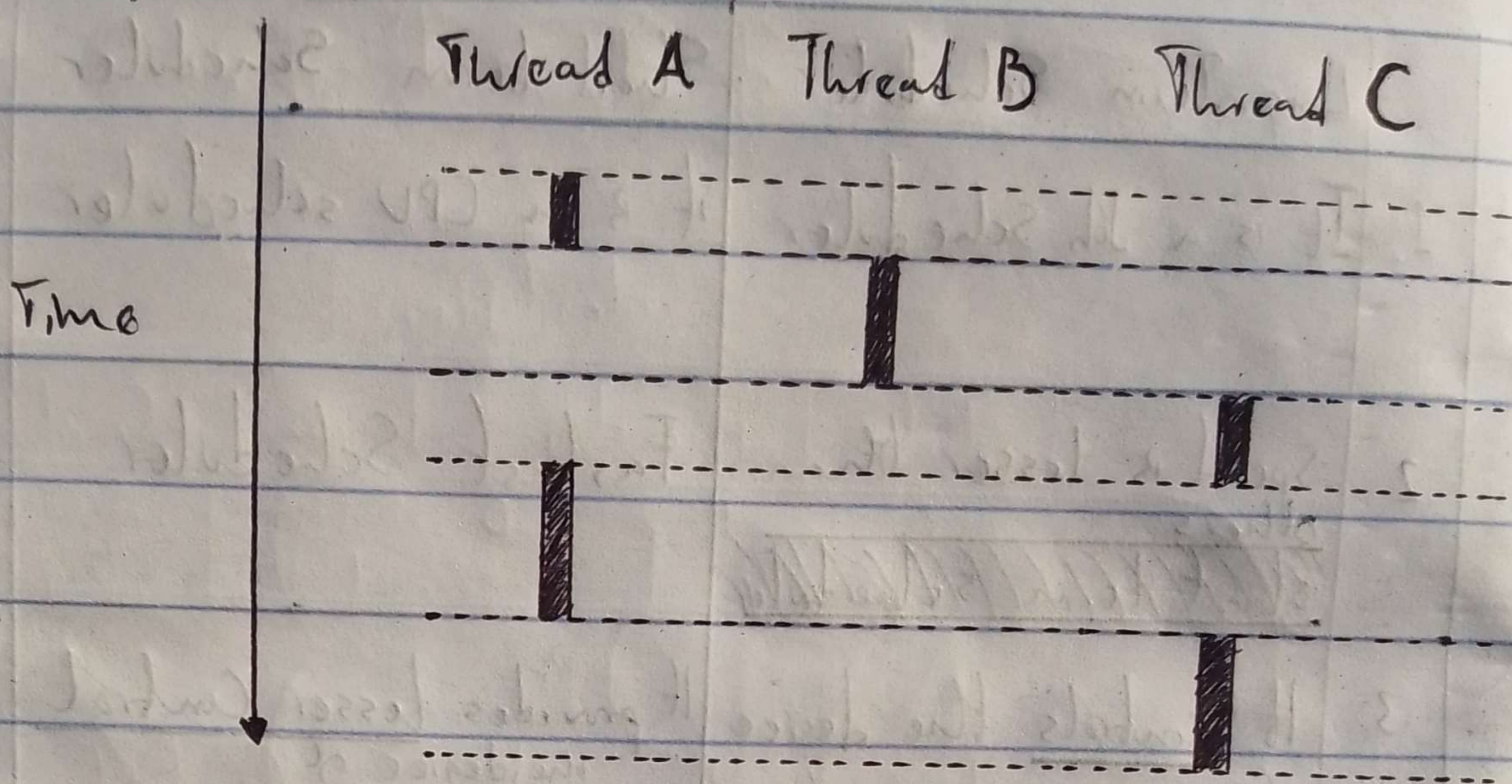|	Long Term Scheduler	Short-term Scheduler	Medium-term Scheduler
1	It is a Job Scheduler	It is a CPU scheduler	it is a process swapping scheduler
2	Speed is lesser than others ~~Short term Scheduler~~	Fastest Scheduler	Second Fastest scheduler
3	It controls the degree of multiprogramming	It provides lesser Control over the degree of multiprogramming	reduces the degree of multiprogramming
4	almost absent or minimal in time-sharing System	minimal in time-sharing system	it is a part of Time-sharing Systems
5	It selects processes from pool and loads them into memory for execution	it selects those processes which are ready to execute	It can re-introduce the process into memory and continue execution

e Draw a Process Containing Threads ?

Ans :
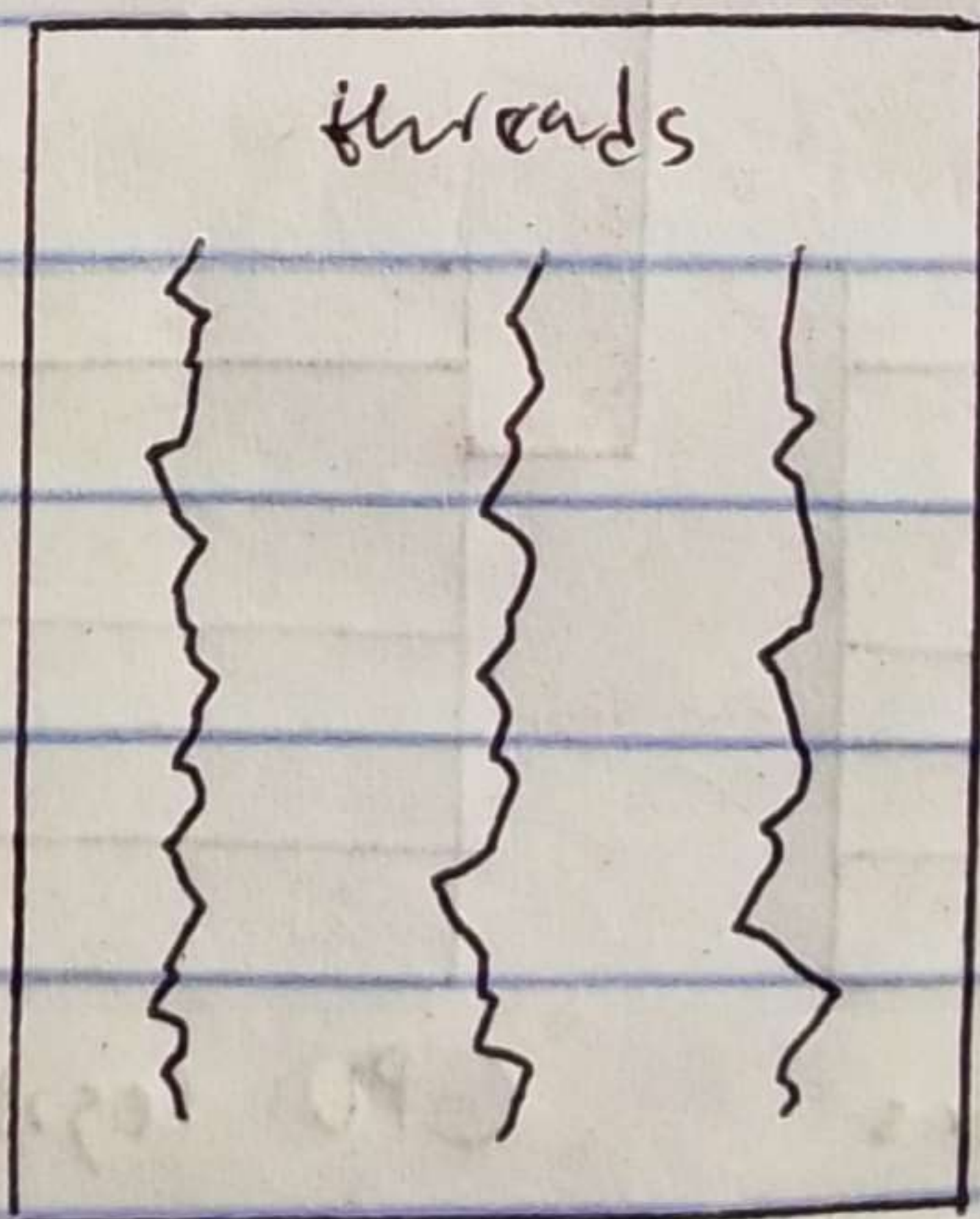
Process

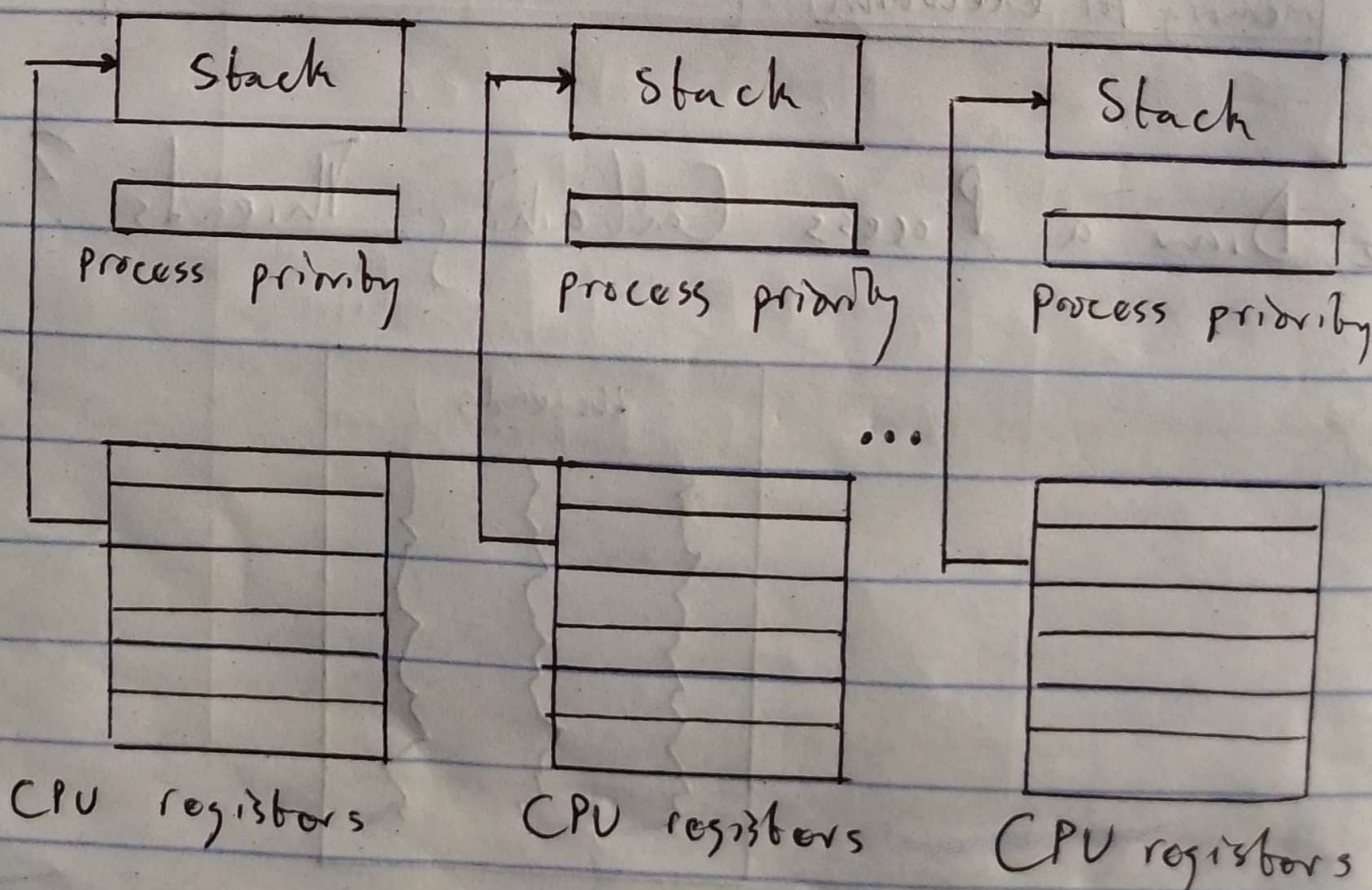## f Draw a diagram Concurrent and Sequential Thread Execution?

Ans:

	Thread A	Thread B	Thread C

Time ↓

Concurrent : A - B , A - C

Sequential : B - C

g Draw a diagram containing multiple processes

Ans:

Stack	Stack	Stack

Process priority   Process priority   Process priority

...

CPU registers   CPU registers   CPU registers

q. Draw a diagram of the Dispatcher?

Ans: From Other states:-