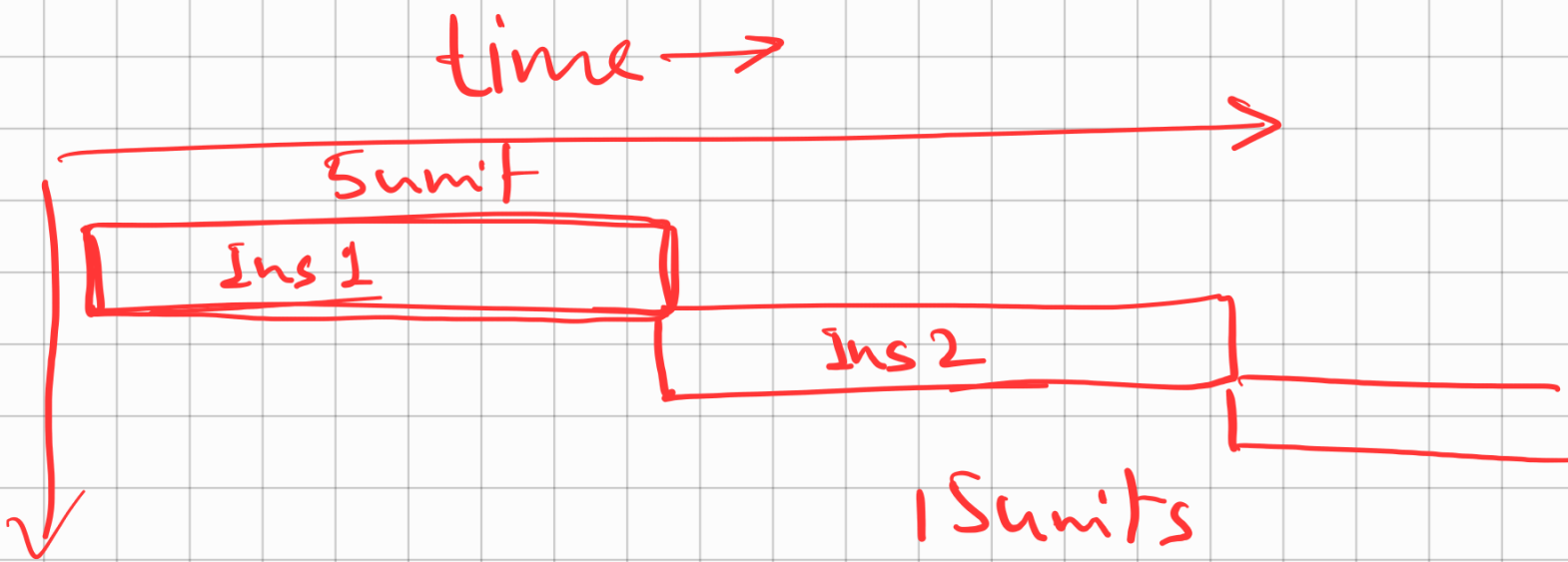


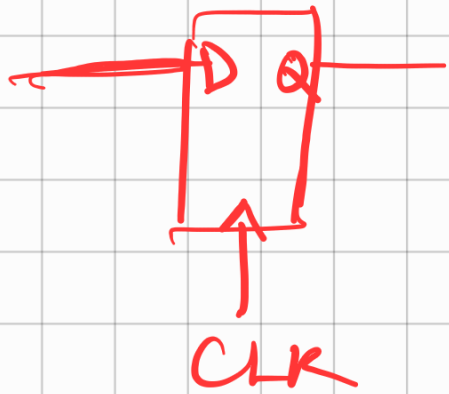
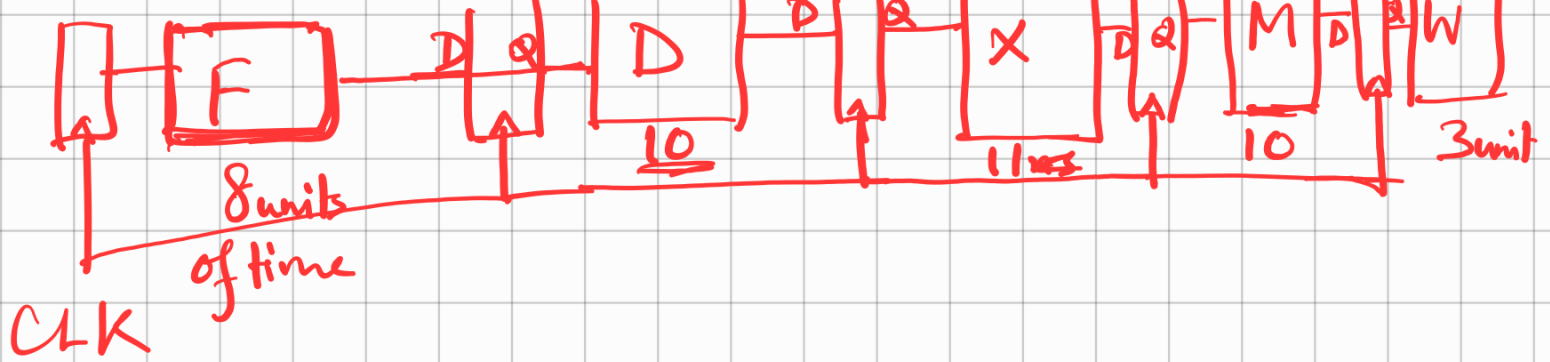
Pipelining our architecture



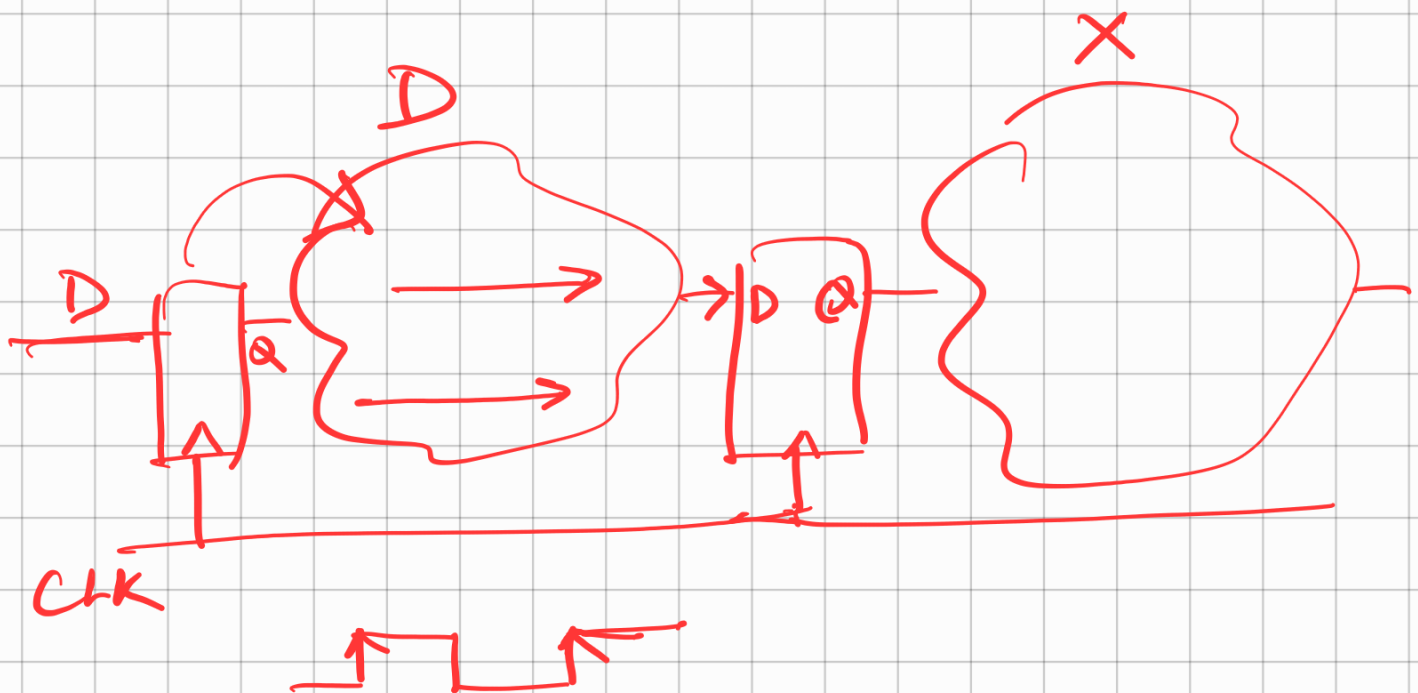
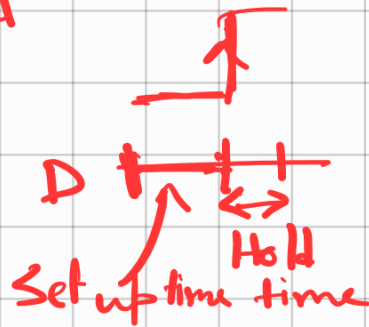
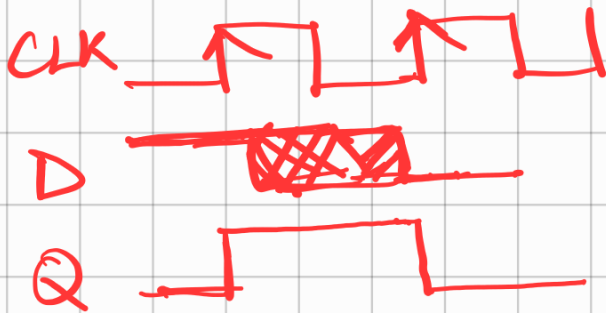
F	D	X	M	W
---	---	---	---	---

1 2 3 4 5 6 7

1	F	D	X	M	W		
		F	D	X	M	W	
			F	D	X	M	W



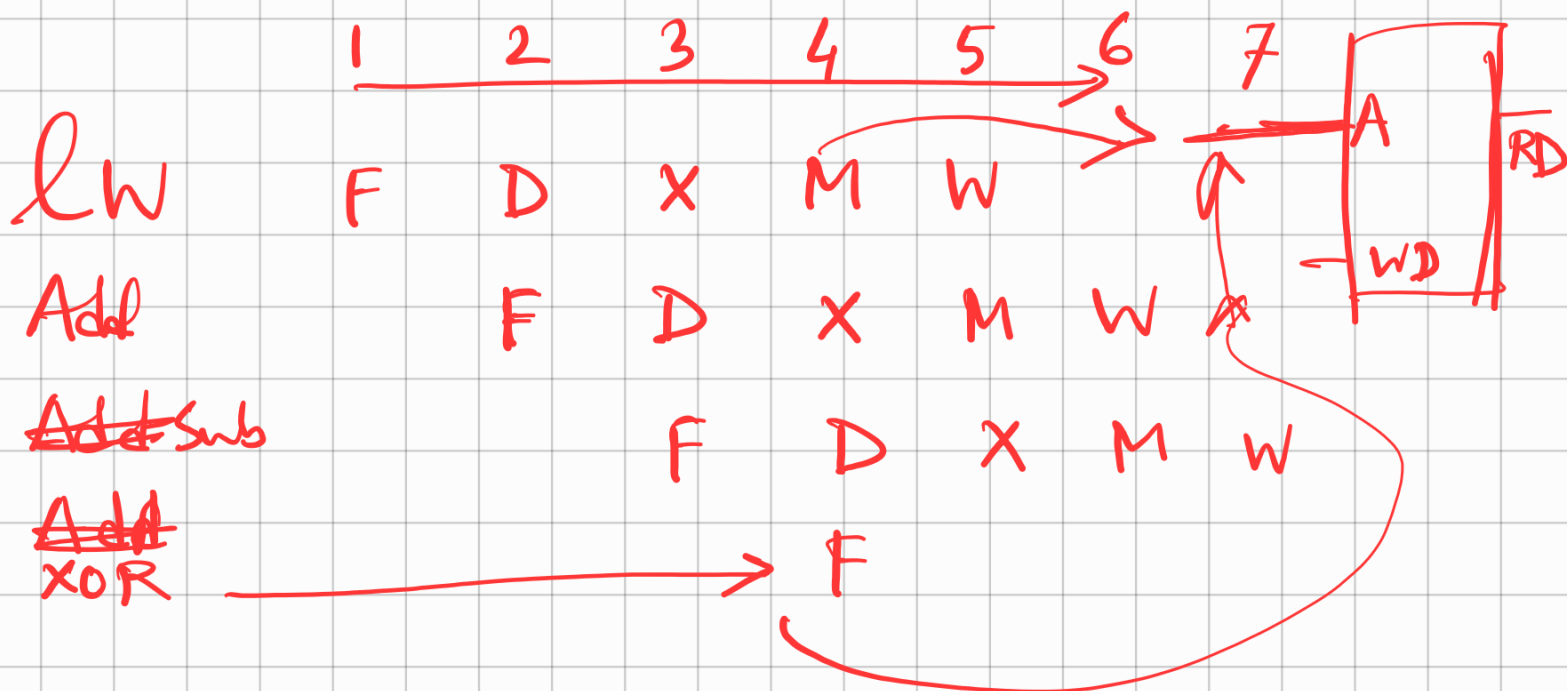
Hold time violation.



Incl	F	D	X	M	W		
2		F	D	X	M	W	
3			F	D	X	M	W
4				F	D		
5							

Ideal pipeline

- All objects go through same stages.
- No sharing of resources betⁿ any two stages
- Propagation delay through all pipeline stages is equal.
- Scheduling of transactions entering the pipeline is not affected by the transactions in other stages.



Structural Hazard

