L1.0 Pushdown Automata

(Introduction)

A Pushdown Automata (PDA) is a way to implement a Context Free Grammar in a similar way we design Finite Automata for Regular Grammar

- -> It is more powerful than FSM
- -> FSM has a very limited memory but PDA has more memory
- -> PDA = Finite State Machine + A Stack

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PUSH: A new element is added at the Top of the stack

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Top	С		L	
	Ь	Top	Ъ	
	a	•	a	
Stack		k 5	Stack	

### A Pushdown Automata has 3 components:

- 1) An input tape
- 2) A Finite Control Unit
- 3) A Stack with infinite size

