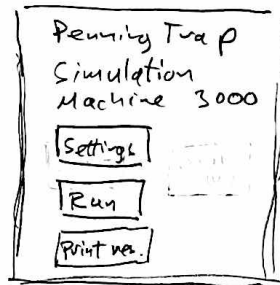


## Code design : Who's running the simulation ?

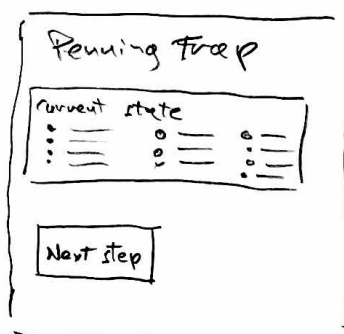
- Many ways of doing it, but here are two different strategies

- 1) • The main program starts the simulation  
• Other part of code runs the complete simulation (loop over time steps) and takes care of saving result in memory or write to disk



New output ?  
Modify the  
"simulation machine"

- 2) • The main program runs the loop over the time steps.  
• The ~~Penning~~ simulated system (Penning Trap) doesn't contain any of its own history, ~~it~~ it's just a system with a current state  
• The main program is responsible for extracting whatever it wants at whatever time steps it wants.



### Personal opinion

- I find approach  
?) more intuitive and flexible
- Can modify system how I want when I want without changing the Penning Trap code