

1. Good Evening
  2. Lecture begins at 9:05pm
  3. Topic → How to approach LLD interviews  
└ Design a Pen
- 

## Agenda

Non-technical soft-skills kind of class

1. Different type of LLD interviews
2. Approach for different LLD interviews
3. Design a Pen [20-30 minutes]

## Three types of LLD interviews

↓ Theoretical ✓	↓ Design ☆	☆ Machine Coding Design Interviews
1. Niva : knowledge test	1. Problem Solving	1. Problem Solving
2. Questions around OOPs & Design Patterns	2. <u>Case Study</u> ☆ No Code	2. Case St-dy ☆ Working Code
3. Old Indian tech companies TCS, Infosys, HMT Oracle	3. MS, Amazon Google, Walmart	3. Top Startups e.g. Flipkart, Scalr, unacademy, Cred.
4. 30 min long	4. <u>45 mins long.</u>	4. 2:30 hour long.

45 minutes

## Steps in Design LLD interview

✓ 1. Single line Problem Statement

e.g. Design Book My Show

Overview

2. [ Gathering Requirements / Clarifying Requirements ]

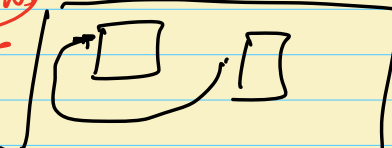
12-15 mins

5 mins

3. Use case Diagram [2-3 %]

10-15 mins

4. [ Class Diagram ] Entities  
Interfaces → Design reasons

5. Schema Design. 5-8 mins  ER Diagram

Write some part of the code  
→ A couple of functions.

30-35 min

{ Leave some time  
for discussion. }

# Steps in Machine Coding Interview

2.5 hours long.

1. Detailed document on problem statement. ✓

2. [ Clarifying Requirements : Do not assume something that the interviewer has not intended.

30 mins

3. [ Class Diagram.

4. [ Scheme Design.

+

5. Working Code. →

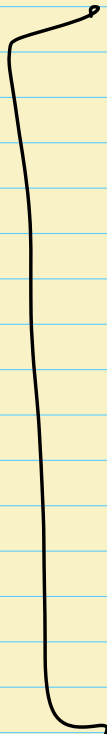
1.5 hour

+

6. Discussions →

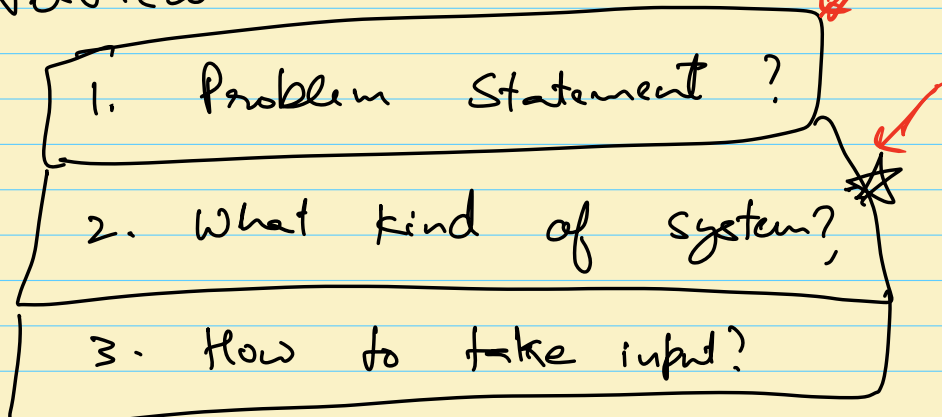
30 mins

# Scaler Course.

- 
1. Single line Problem Statement
  2. Gather Requirement.
  3. Clarifying "
  4. Class Diagram
  5. Schema & API Design.
  6. Code
- 

Deep Dive on each step  
[Design a Pen]

0. Overview: Establishing Expectations.

- 
1. Problem Statement ? ✓
  2. What kind of system? ★
  3. How to take input?

## Problem Statement

Aware

→ Align yourself with interviewer by sharing what you know.

Not aware.

1. Ask the interviewer  
\* let him brief you.

What kind of System?

1. Entry

→ Class Diagram

2. Interactive System eg. Games.

X		
	O	

[How DB is not involved]

B. Web APIs

(Restful APIs)

Schema Design also

↳ if persistence is reqd.

## How to take input

1. Via Command Line ]
  2. REST Api > a frontend]
- 

### Gathering Requirements.

→ Asking questions? X

VS

→ Make suggestions with reason to identify requirements. ✓

### Pen

→ Will Pen support multi color?

VS

→ Pen should have different colors.?

[Make Suggestion + Add Question?]

☆

S-8 core features identification

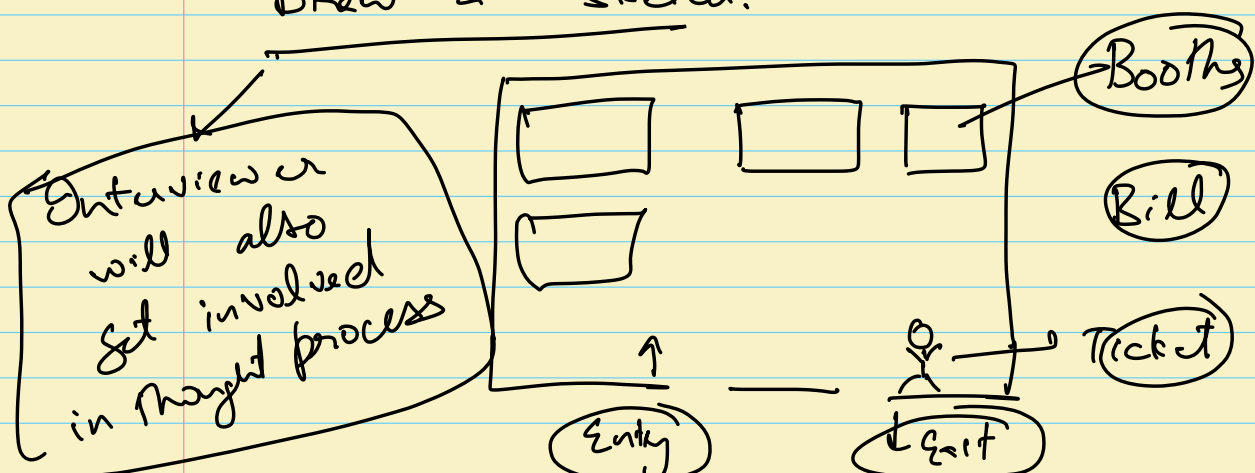
→ Showcase your core skills.

→ Drive the interview

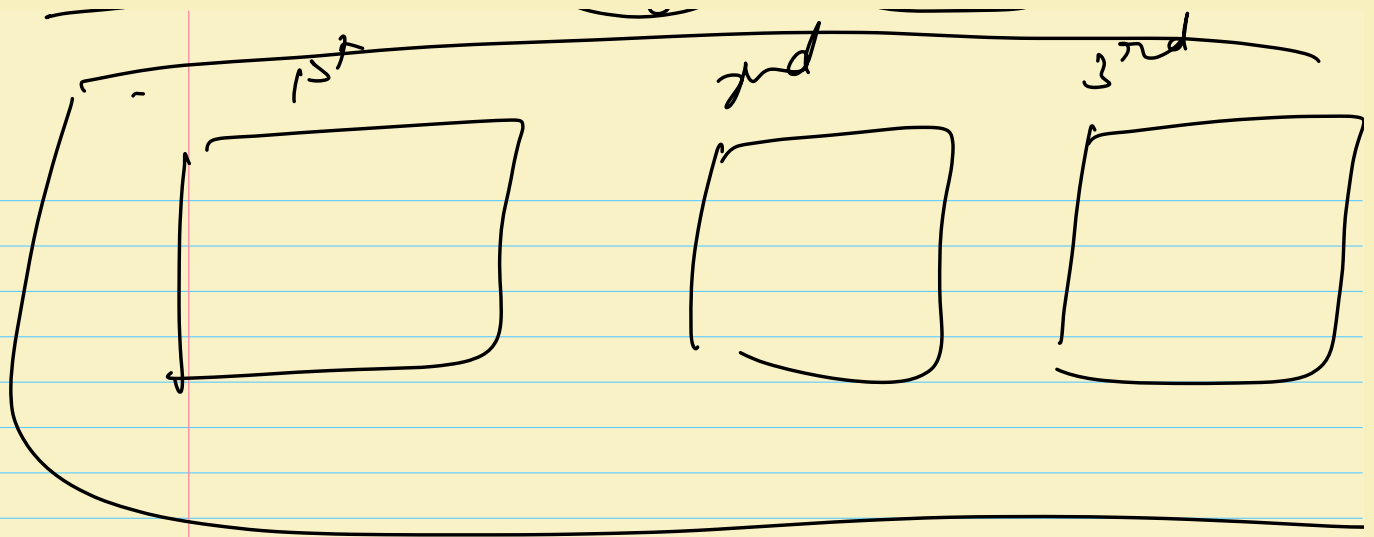
Ideas about relevant questions.

1. Visualise the problem, e.g. Parking lot

Draw a sketch.







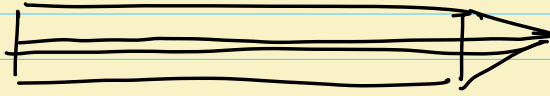
Break : 10:00 - 10:10

Design a Pen.

Designing a Pen.

1. Overview : Entity problem  
A class Diagram.

## 2. Gathering Requirement?



→ Pen could be of different types  
[Ball Pen, Gel Pen, Fountain Pen]

→ price, brand, name.

→ Some pen may not have a refill ✓

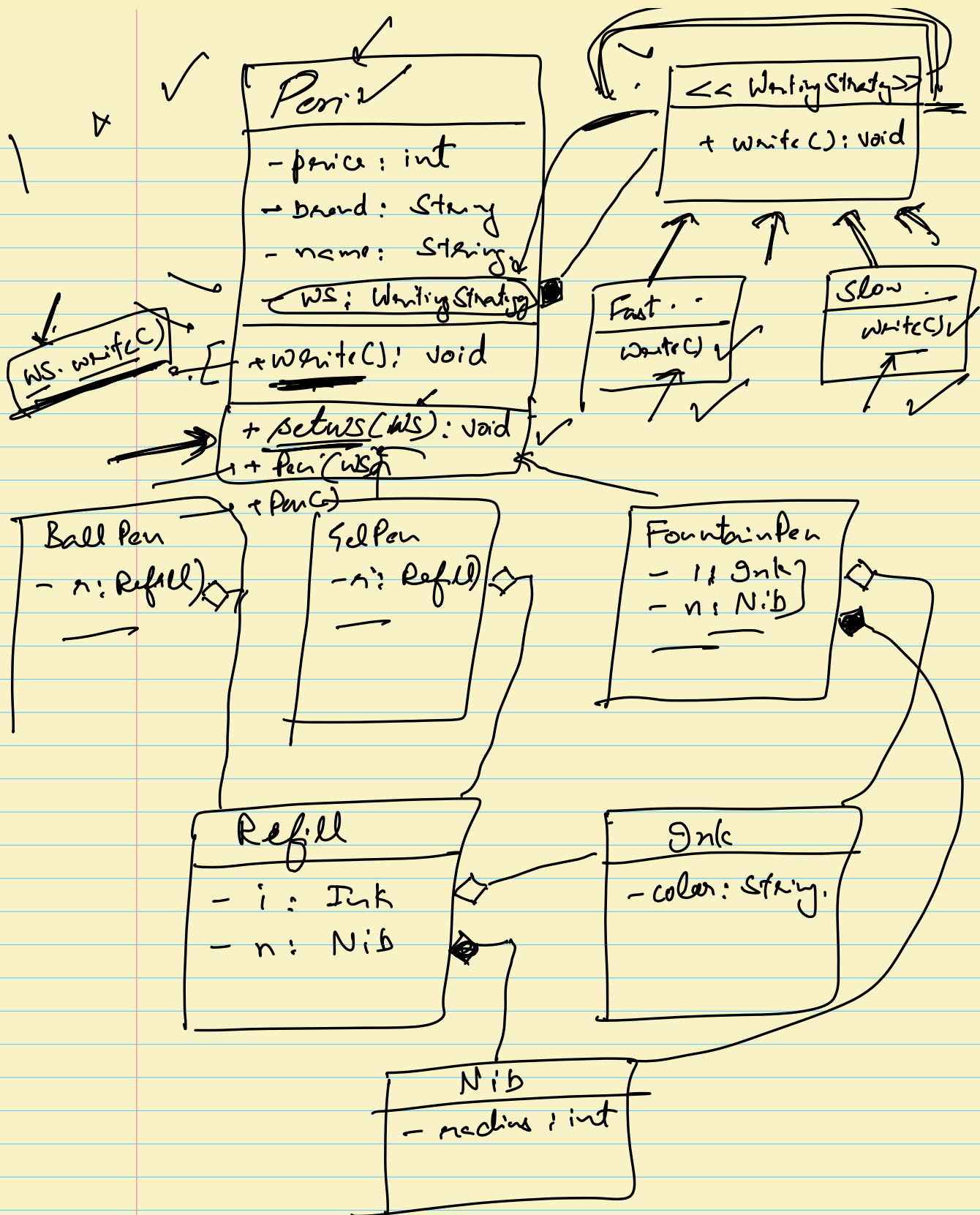
→ Fountain Pen will have ink directly.  
" " nib "

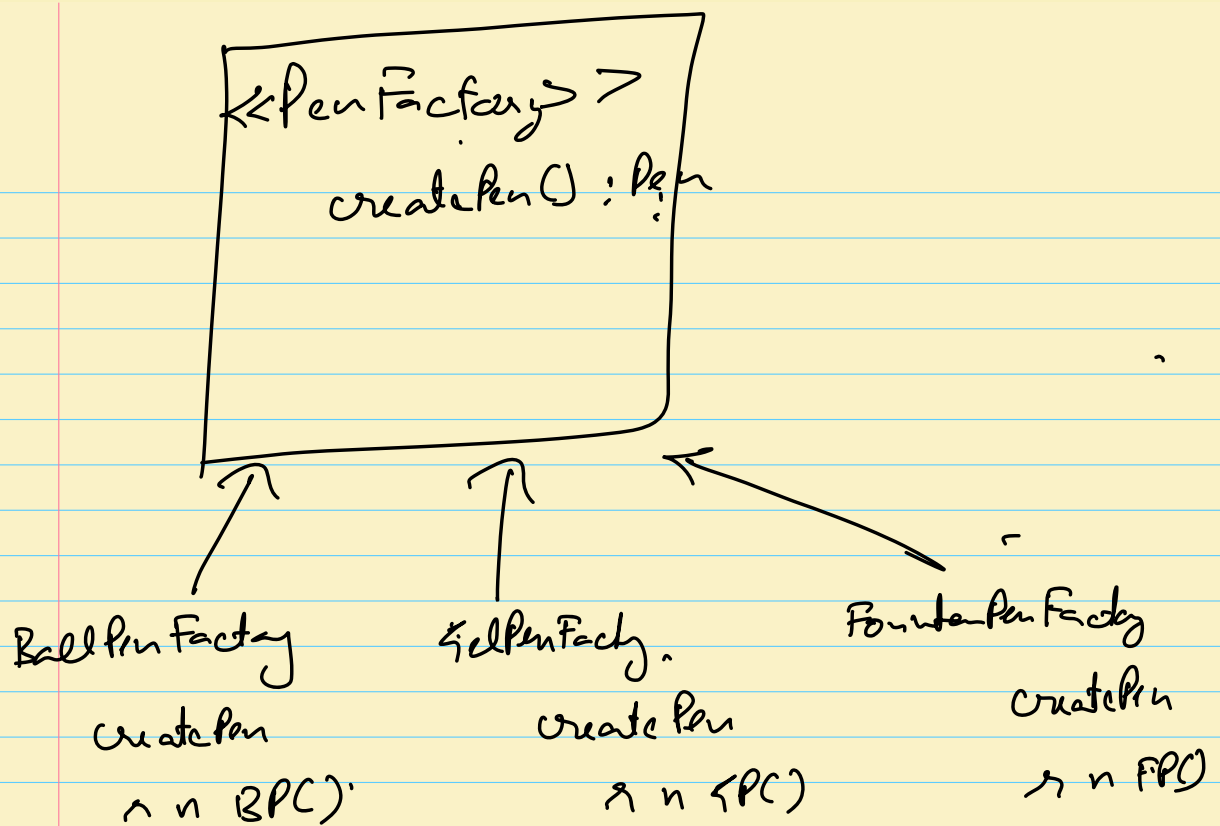
→ Refill will have nibs

→ " " " ink

→ Ink will have color.

→ Nib has a radius.

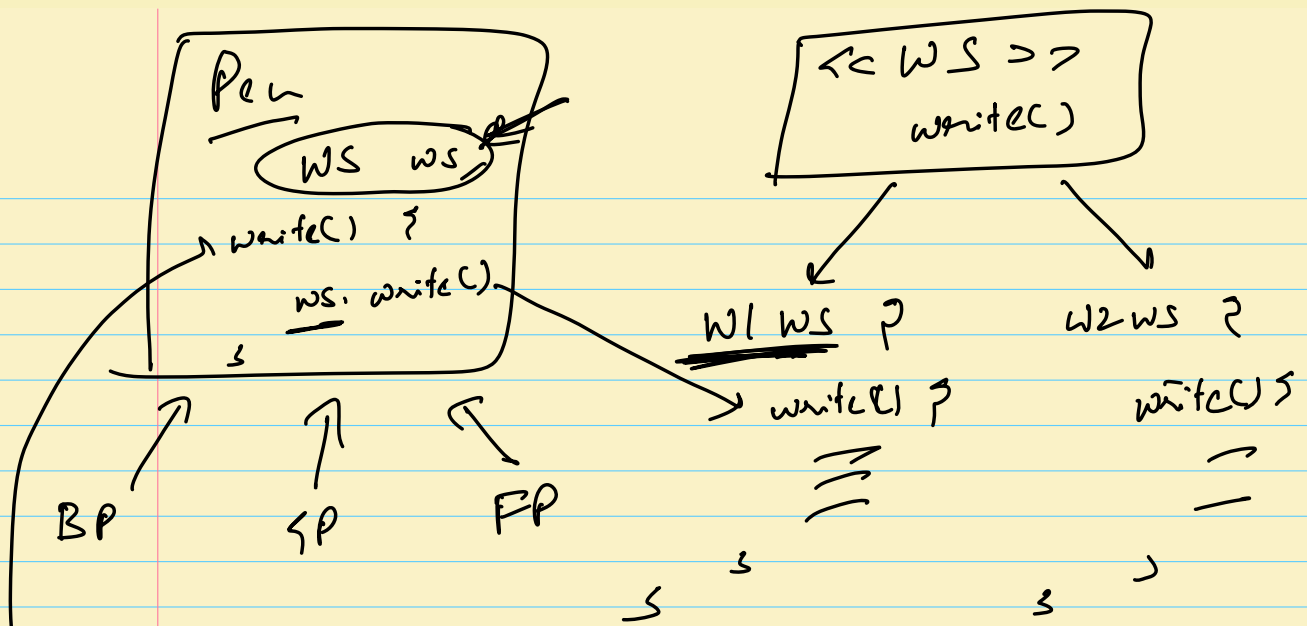




Thick vs Thin

Slow vs Fast

Thick + Fast  
or  
Thin + Slow } → Decorator

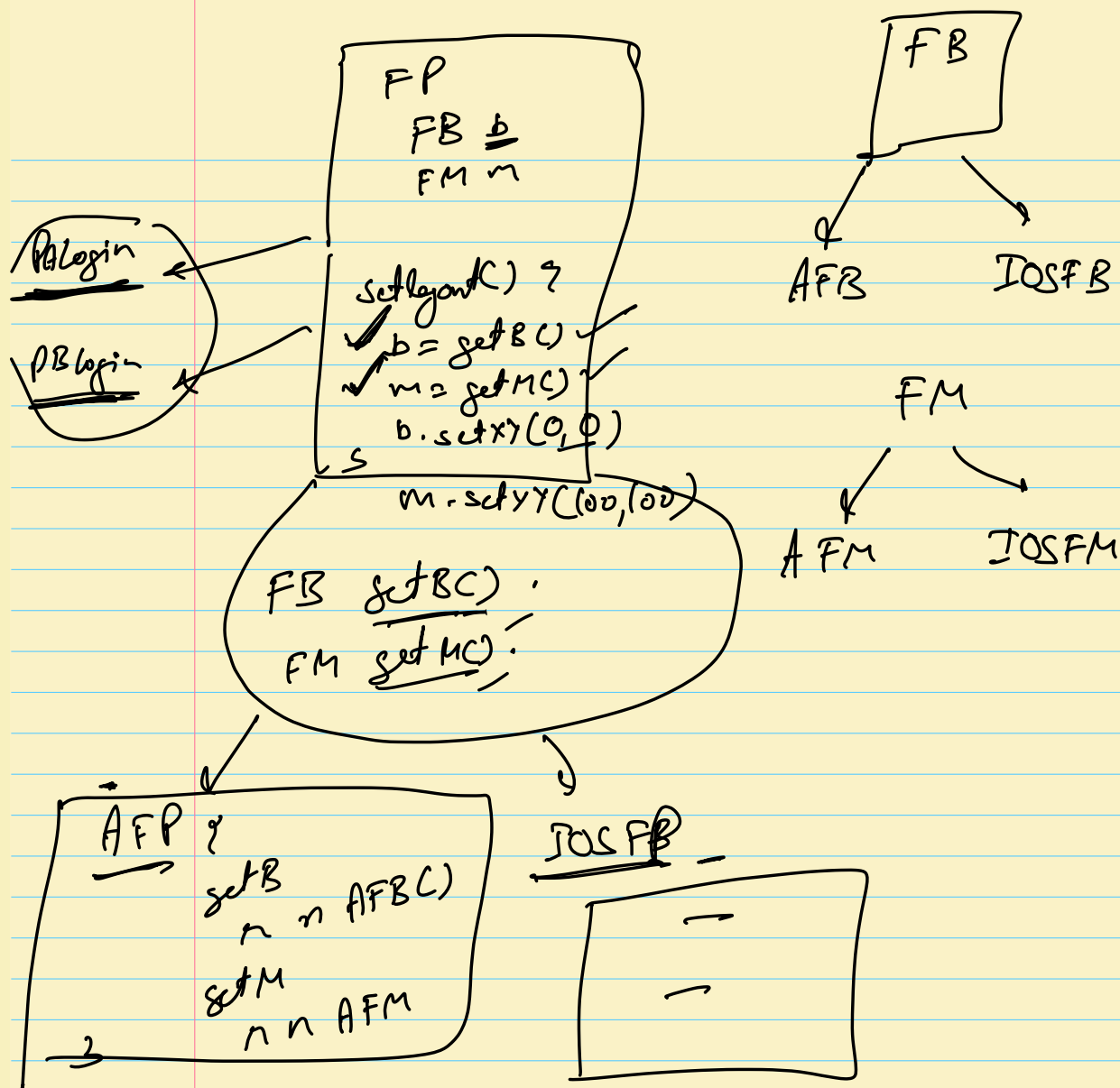


Pen p = new BP()

p. setWS ( new w1 wsc() )

p. writeC();

→ Why FM loses to AF



23 ——— 11

HeadFirst DP