

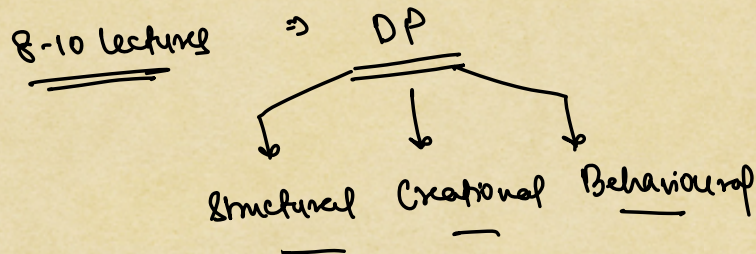
DP { \* where you will use it ??  
\* interview based ques.

LLD-2

2 lectures  

$$\begin{pmatrix} 1 \rightarrow 2 \\ 0.5 \quad 1.5 \end{pmatrix}$$

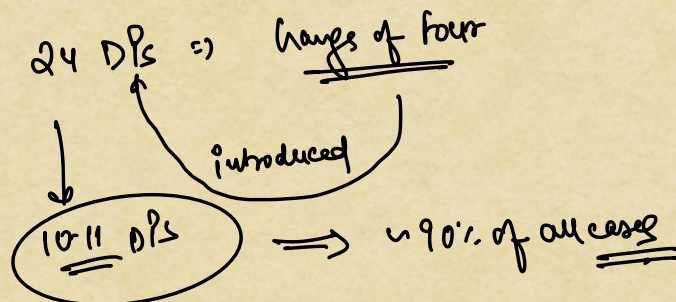
SOLID



DP :- chakravy

Structure / formation / pattern  
 ✓                      ↓                      ✓

Design patterns  $\Rightarrow$  specific structure of code





⇒ SOLID

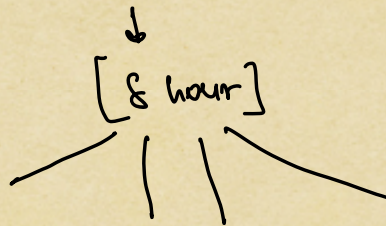
- S → Single Responsibility principle
- O → Open closed principle
- L → Liskov substitution principle
- I → Interface segregation principle
- D → dependency inversion principle

\* principles ≠ rules

\* try to make your code as modular as possible

SOLID

engineer ⇒ 9 hours ⇒ + hour



12% ⇒ engineer spends time writing code

→ meetings :- product req., code review, eliminations, task breakdown, design disc.

→ bug fixing

→ PR review

→ documentation

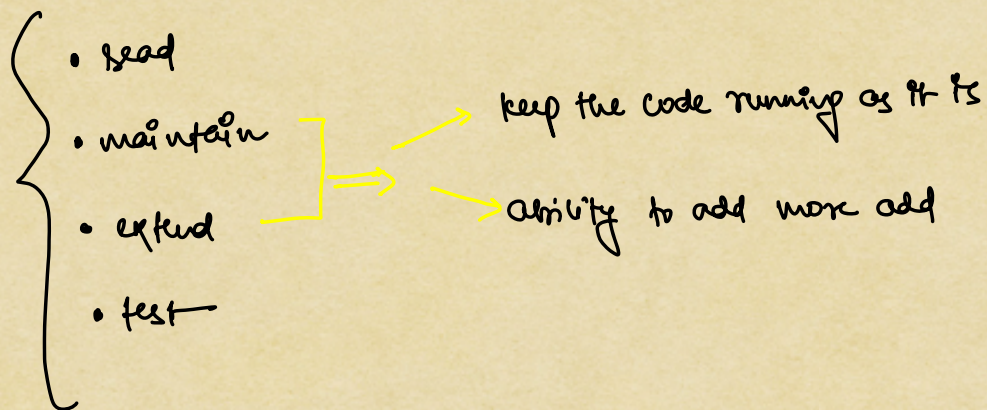
extensionability ≠ scalability



→ testing

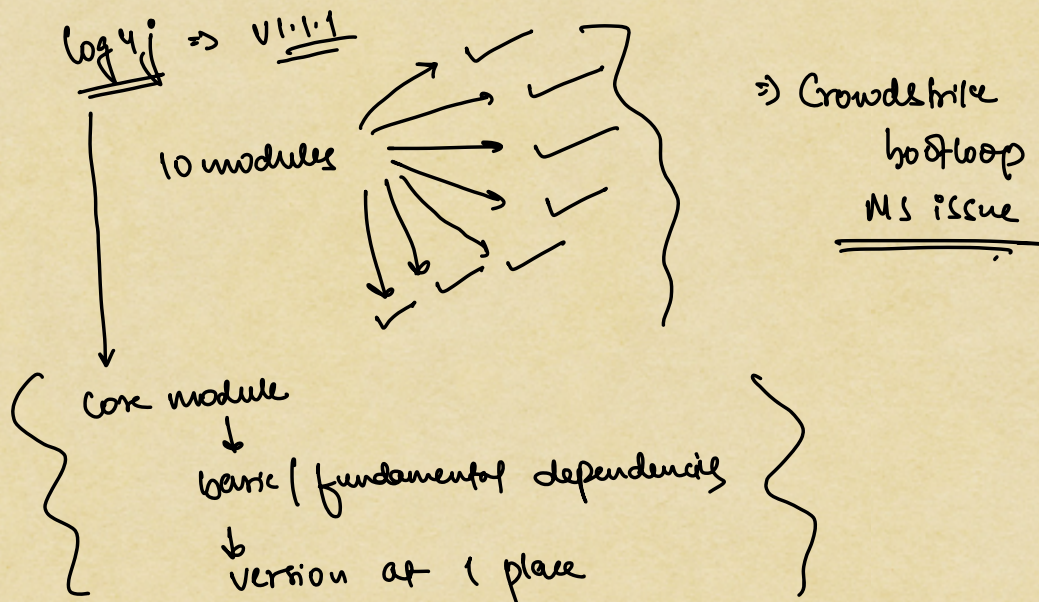
→ chai / coffee / gossip etc.

majority → reading, maintainence, extensibility,  
testing



SOLID ⇒ helps you to make code more

(REMT)





⇒ SRP

## Single responsibility principle

any block of code should exist to handle a single responsibility

```
graph TD; A[any block of code] --> B[class]; A --> C[method]; A --> D[block]; E[single responsibility]
```

```
class Car {  
    String carType;
```

## Start Engine for multiple types

```
void startEngine() {
```

```
if (cortype == EV) {
```

```

} else if (centype == hybrid) {

```

$$3L^3$$

3 ↓  
w

Cartype = ev

↓  
पुनः

Cartype = petrol

↓  
hybrid

Curtype : hybrid



⇒ multiple if/else

⇒ readable (X)

⇒ maintainable (X)

⇒ extend (X)

⇒ test (X)

⇒ OPEN - CLOSED PRINCIPLE:-

Open for extension

close for modification

⇒ block of code [class, method, block]  
is serving a purpose,

not allowed (should not) modify it.

⇒ add more code (✓) ⇒ allowed to extend

⇒ modify existing code (X) ⇒ not allowed to modify

SOLID  
↓ ↓  
SRP OCP