

Object ORIENTED PROGR

Four pillars ① class {

Name variables;

Behaviour methods } ;

}

Pillars oops → ① Abstraction ② Encapsulation
③ Inheritance ④ Polymorphism.

UML Diagram

- ① Static Diagram (Class Diagram) (Structural Diagram)
- ② Dynamic Diagram (Behavioural Diagram).

Class

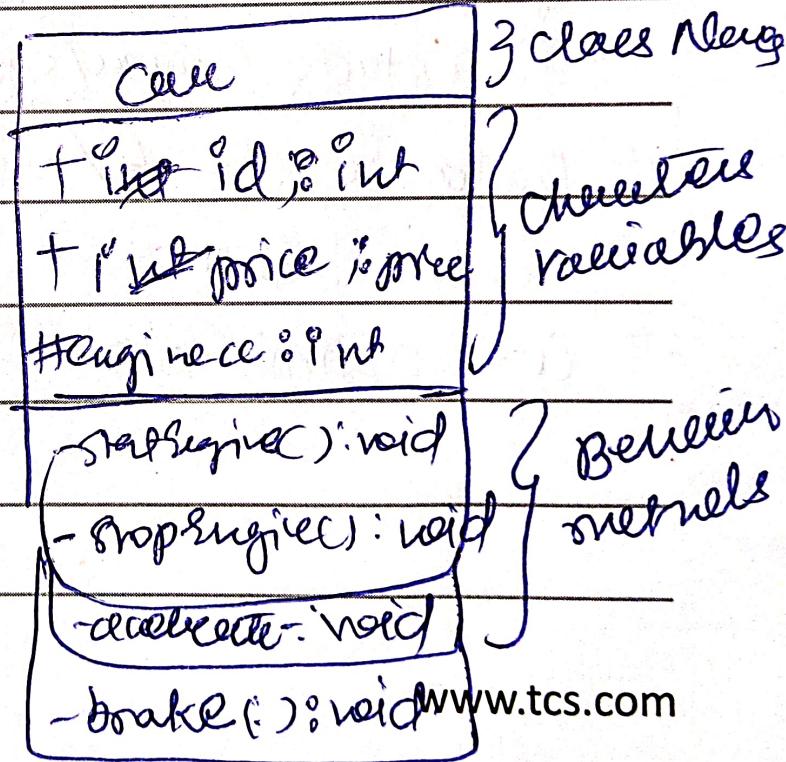
int id;

int price;

String brand;

String model;

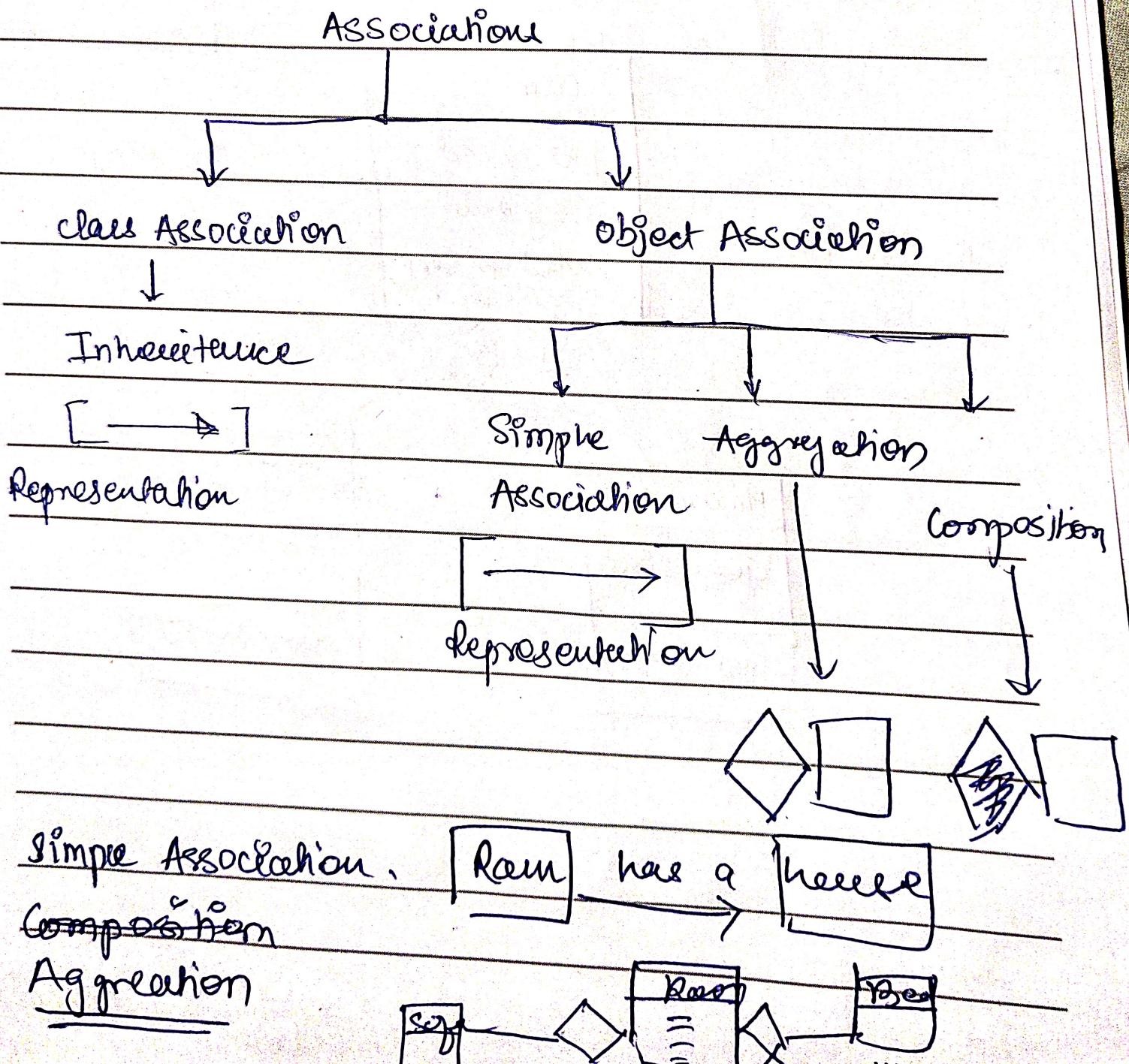
3



(S abstract)

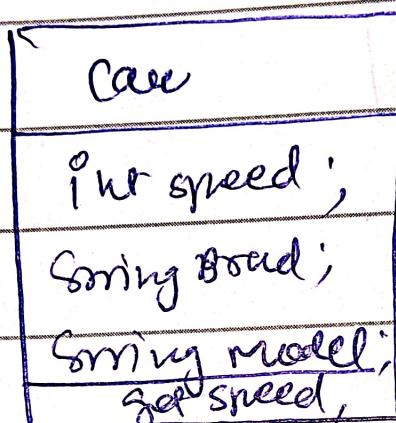
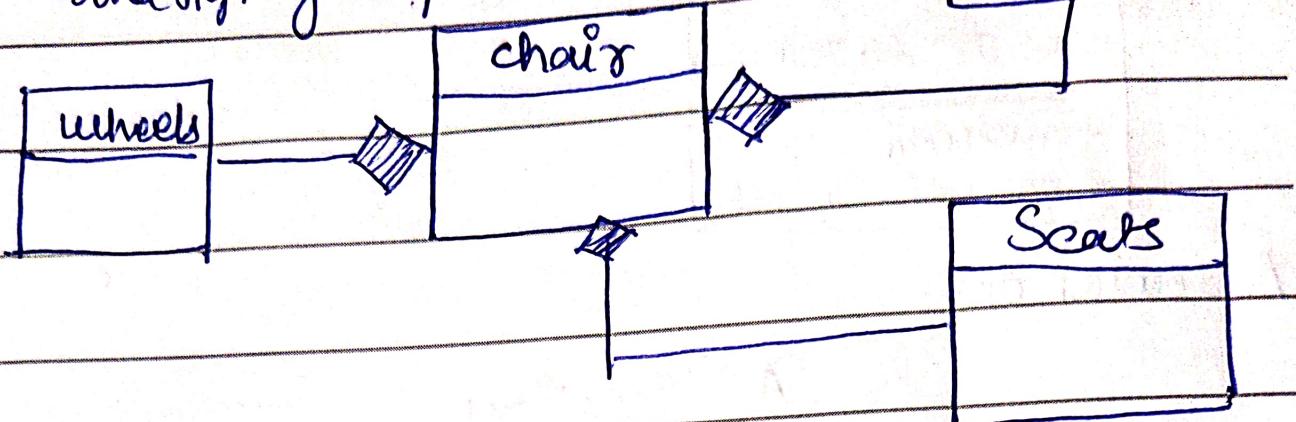
class Name
Var 1 : datatype
Var 2 : datatype
+ method1(): dt
+ method2(): dt

Associations.

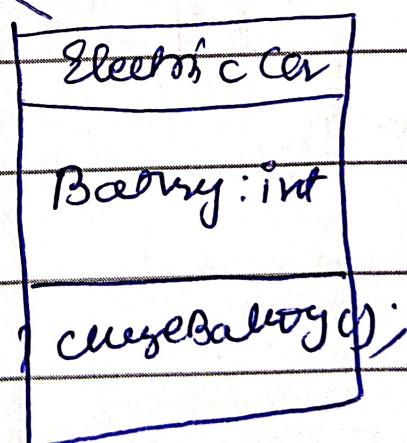
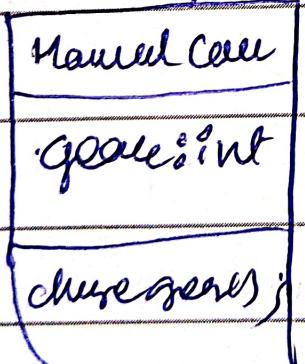


Composition: The relationship is stronger
and tightly coupled.

Atoms

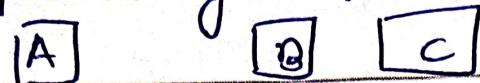


get back
get model

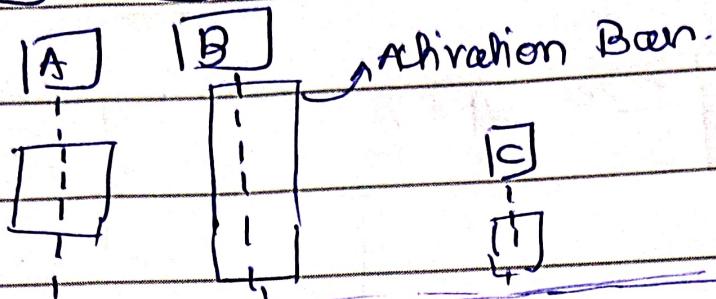


Sequence Diagram

- ① Representing object

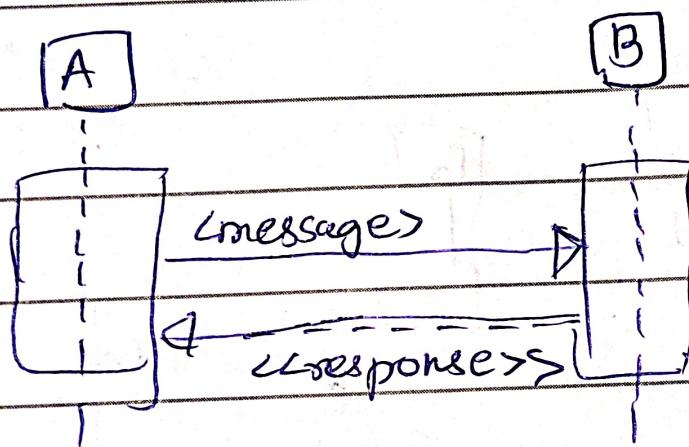


- ② lifeline

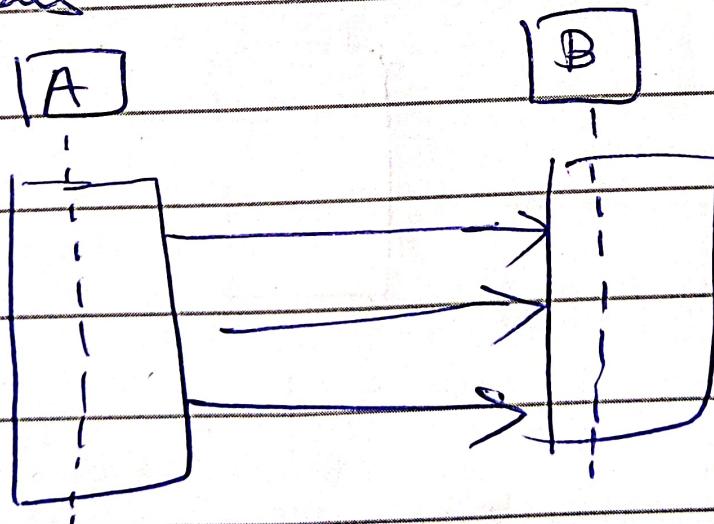


- ③ Message (Synchronous & Asynchronous).

Synchronous

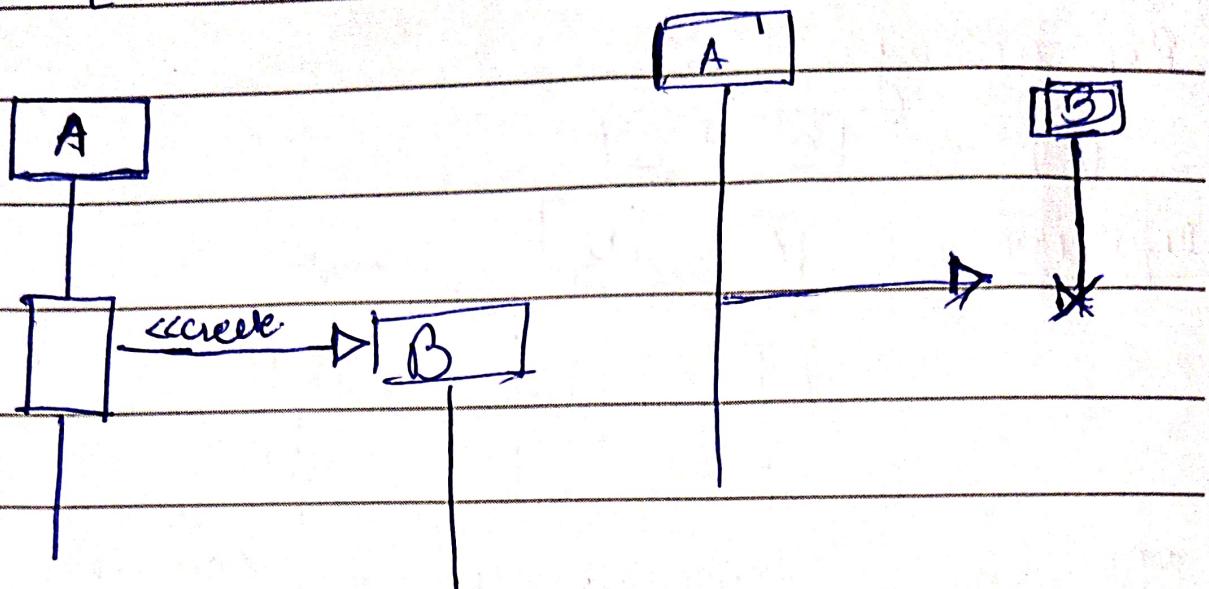


Asynchronous



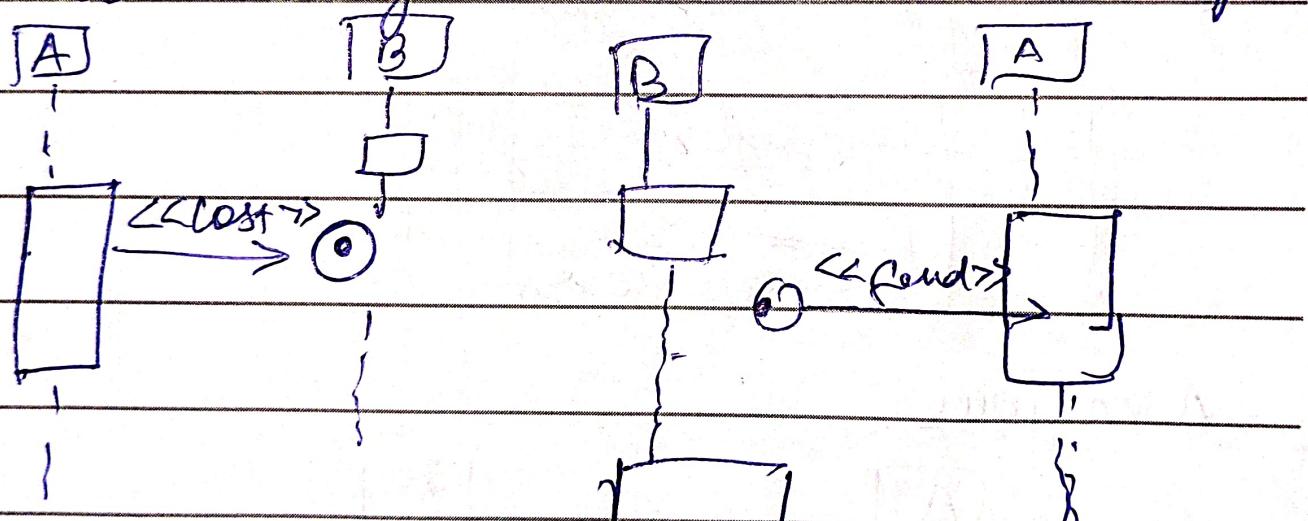
Message { create message }

{ destroy message }

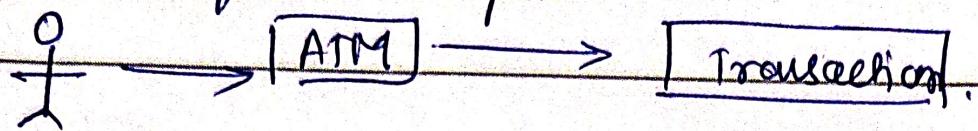


Lost message

Found message



Flow to draw Sequence Diagram.



User -> ATM → user enters user and password → transaction

- Account check kiya if account is valid
- Cash dispenser → if valid dispense cash,
- Once the cash is dispensed then

Sequence Diagram

① Use-case

② Objects

③

