

2.9 - OOPS

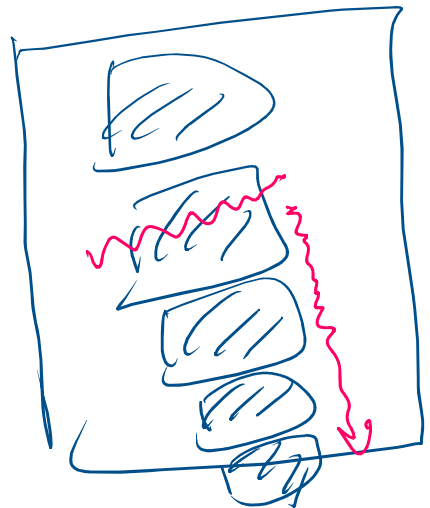
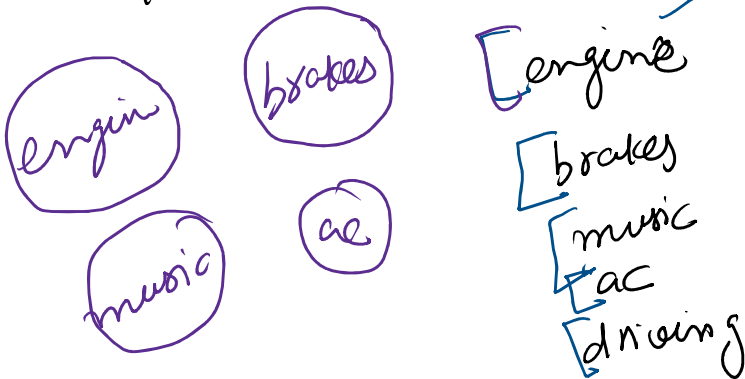
Sunday, October 26, 2025 5:48 PM

00

[practice]  
Object Oriented Programming

Programming Paradigms  
→ Procedural → [Procedural]  
→ OOP

How?



⇒ OOPS

[O + O + O + O]

What??

→ It's a programming technique where we think of a problem in terms of real world independent entities.

procedural : C, Scala  
OOPS : C++, Java, Python, C#

# Pillars of OOPS

→ Class  
→ Object

→ Encapsulation  
→ Inheritance  
→ Polymorphism  
→ Abstraction.

⇒ Class is the blueprint of the real world entity. Object

⇒ Object is the real world entity  
↓  
which gets memory.

class Customer  
name;  
age;  
email;  
}

←

~ - Trad. the class name always starts with a

④ In Java, the class name always starts with a capital letter.

# # Objekt

# Object

- ↳ Real world entity ]
- ↳ exists in memory ]
- ↳ instance of a class ]

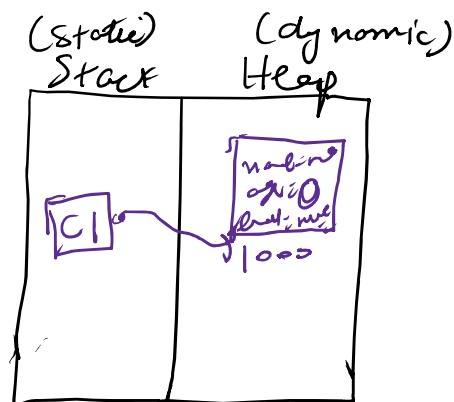
Instance of a class

Customer cl = new (cust to make);

reference variable

allocates memory on heap

[object]



Q) Define a person class with attributes name and nationality. Then create two objects and set the values.

→ attributes of a class are called instance variables / member variables / data members.

⊕ When we create an object, the first method, that is called by Java is constructor.

# Few properties about constructor:

⊙ Constructor name has to be same as the class name

⊕ There is no return type for a constructor.

⊕ If we don't write our constructor, java By default adds a constructor.

⊕ Its either the programmer who writes the constructor or java.

Pono ek saath nhi likhenge.

⊙ A class can have multiple constructors.

o) Define two constructors in person class, one default and one parameterised.

## this key word

refers to the current object.

this → class  
→ object  
→ constructors  
→ Inheritance