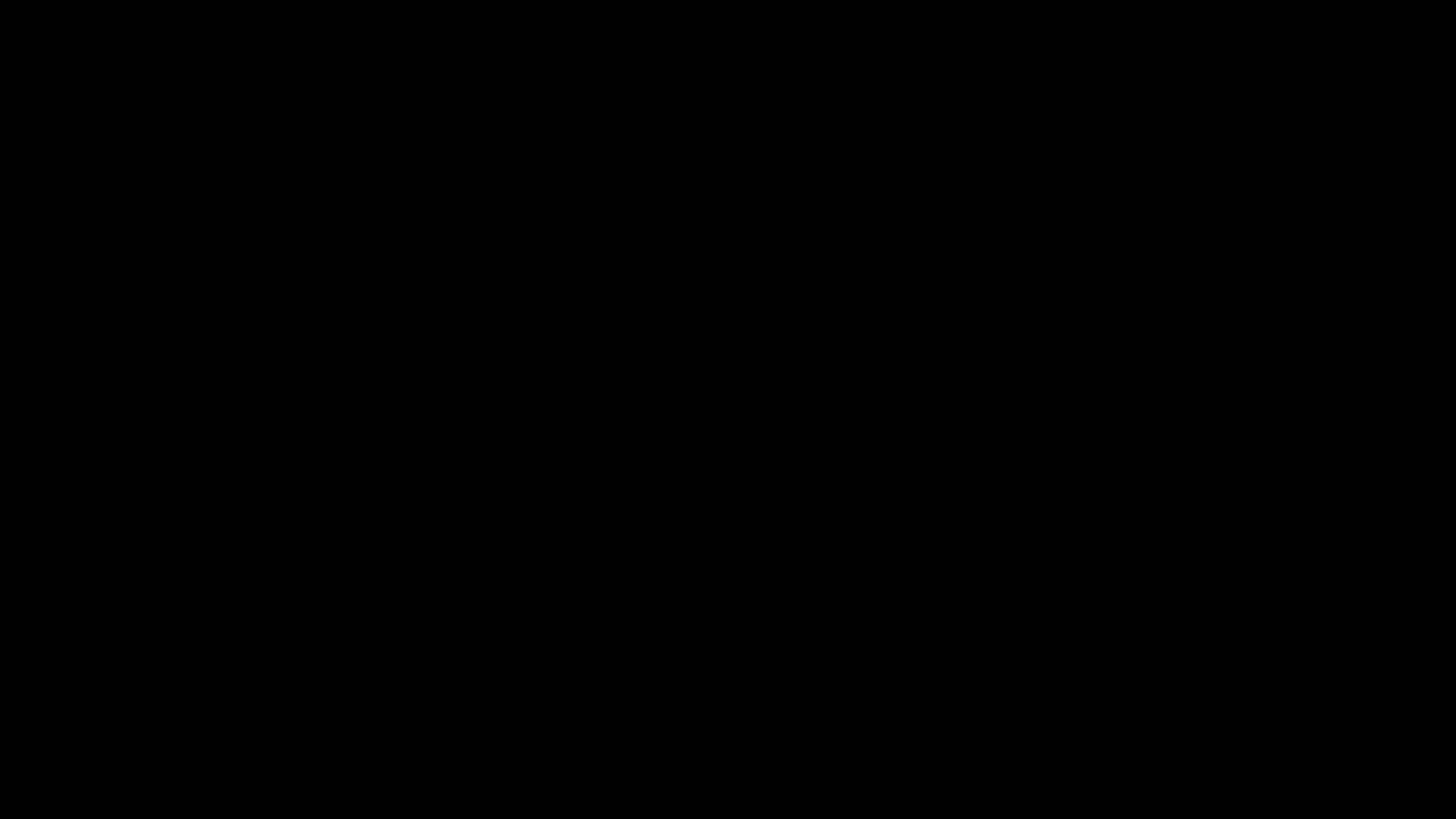




OOPS

**Object-Oriented
Programming**



Contents

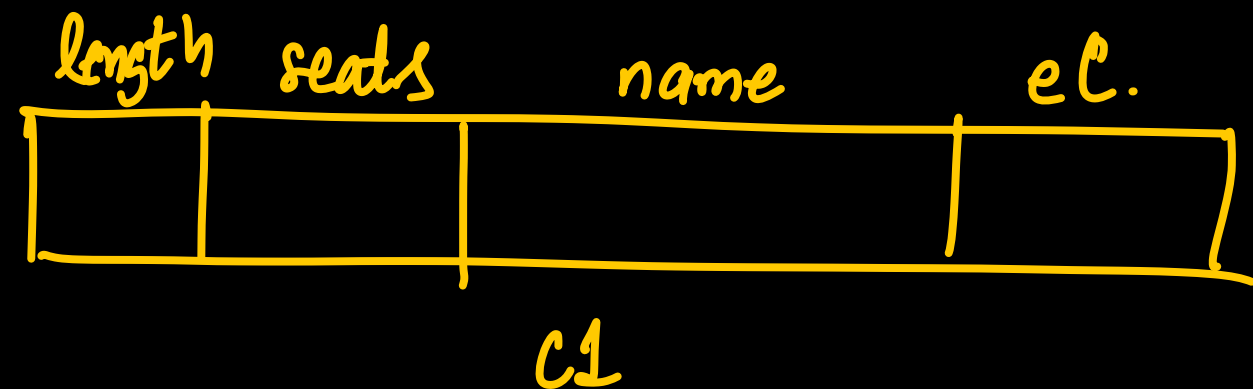
1. User Defined Data Type
2. Selection Sort
3. Insertion Sort
4. Questions on Sorting

User Defined Data Type

```
class Car {
    double length;
    int seats;
    String name;
    double engineCapacity;
}
```

```
Car c1 = new Car();
```

```
c1.seats = 5;
```



Classes and Objects



blueprint



real world entity



Yaad hai **Scanner?**



Passing objects to **Methods**



Methods inside a class

Polymorphism *(many forms)*

|

ek naam multiple kaam

private Keyword & Encapsulation

↓
getters & setters

↓
data hiding

Access Modifiers

Modifier	Class	Package	Subclass	World
<code>public</code>	✓	✓	✓	✓
<code>protected</code>	✓	✓	✓	✗
<i>no modifier*</i>	✓	✓	✗	✗
<code>private</code>	✓	✗	✗	✗

Constructors

```
Student s = new Student("Priya", 24, 7.8);
```

this Keyword

price	name
0	null

c1

price = ~~12.5 Lac~~ , name = ~~Sonnet~~
12.5 Lac Sonnet

s = Alto x = 4 Lac

price	name
4 Lac	Alto

c2

```
public static class Car{
    int price; // 0
    String name; // null
    Car(){
    }
    ✓ Car(int price, String name){
        price = price;
        name = name;
    }
    Car(String s, int x){...}
    void print() { System.out.println(price
}

public static void main(String[] args) {
    ✓ Car c1 = new Car(1250000, "Kia Sonnet");
    c1.print();
    ✓ Car c2 = new Car("Lord Alto", 4000000);
    c2.print();
}
```

price = x
name = s



this Keyword



THANKYOU

Cuties