

Agenda

- ✓ i) How objects are stored in Java
- ✓ ii) Garbage collector - Intro
- iii) Constructors - [default, no args, args, copy]
- iv) Inheritance

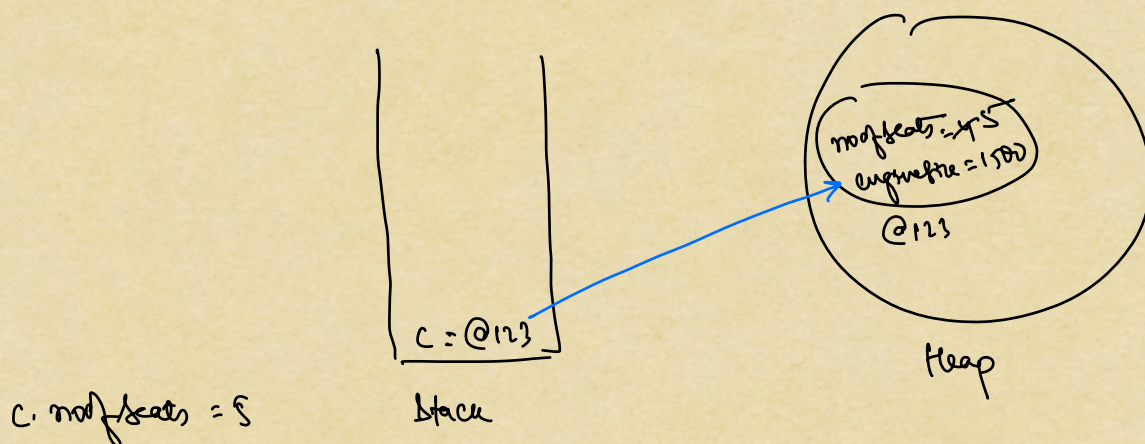
i) How objects are stored in Java?

Ans

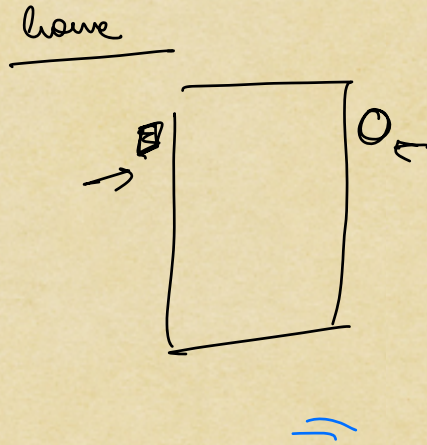
```
class Car {  
    int noOfSeats;  
    int engineSize;  
}
```

→ Car c = new Car();

↓
reference
variable



⇒ Garbage Collector!

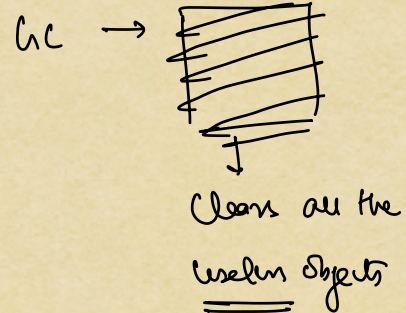


C++

Destructor

Java

Garbage Collector



⇒ CONSTRUCTORS

* Creates Objects

* Objects in Java are always created by using constructor

* new → keyword is used to call constructor to create objects

Types of constructors

i) Default :-

* when there is no cons, Java gives a default constructor

* all attributes are initialised to default values.

ii) No-args :-

* doesn't take any argument

* for all objects getting created, it will put the value given inside the constructor.

Syntax [for any cons]

args can be [0 to N]

accessModifier ClassName (arguments) {

=====

}

ex ⇒ public Car() {
 =====

}

NOTE

We can use private constructor at a lot of places

ex ⇒ Singleton, Builder

iii) Parameterised

→ you can pass multiple parameters to constructor

→ we can have a lot of constructors in a class.

```
public Car() { → Car()
```

=====

}

```
public Car(int noOfSeats, int engineSize) { → Car(int, int)
```

=====

}

```
public Car(int wheelSize, int price) {
```

=====

```
public Car(String brand, int noOfSeats, int engineSize) {
```

=====

→ Car(String, int, int)

}

↖
↙
Class

* Java identifies the constructor with constructor name and parameter data type combinations.

⇒ ability to create multiple constructors in a class

- CONSTRUCTOR OVERLOADING

• COPY CONSTRUCTOR

iPhone 13

- 6"
- A15
- 4GB
- 2 camera
- - -
- - - -
- 65000
- 13

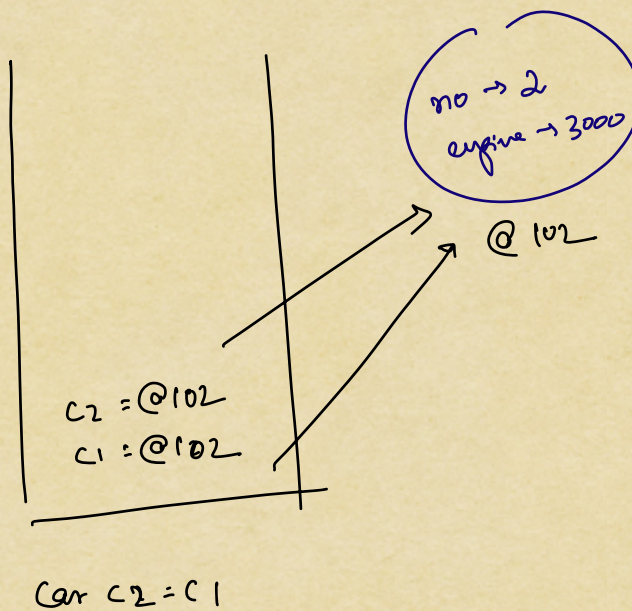
iPhone 14

- 6"
- A15
- 4GB
- 2 camera
- - -
- - - -
- 75000
- 14



Car
→ modHeats
- engine fire

shallow
only copy the reference
variable



Car c1 = new Car();

Car c2 = new Car(c1);

