

## Daily Questions - 3

1) What is oops stands for?

\* Object Oriented programming is a computer programming model that organizes software design around data or objects.

\* procedural programming is about writing procedures or methods that perform operations on the data, while object oriented programming is about creating objects that contain both data and methods.

### Advantages

\* oop is faster and easier to execute

\* oop provides a clear structure for the programs.

\* oop helps to keep the Java code DRY Don't Repeat yourself! Makes code easier to maintain, modify and debug.

\* Less code shorter development time.

2] What is polymorphism? many forms  
poly morphs

In Java means that an object  
can have many forms. polymorphism in  
Java has two types.

Compile time polymorphism

Run time polymorphism

It is done at compile time.

It is static and is implemented  
through method overloading.  
method overriding.

### 3] Interface

In Java is a blueprint of a class.  
It has static constants and abstract  
methods.

```
interface <interface name> {
```

It is a design ~~is~~

WebDriver is an Interface

ChromeDriver is a class that extends RemoteDriver which implements WebDriver.

WebElement is an Interface.

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## 4] Abstract class

The abstract keyword is a non access modifier used for classes and Methods.

Abstract class:- is a restricted class that cannot be used to create objects.

(To access it It must be inherited from another class.)

Abstract method:- can only be used in an abstract class, and it does not have a body, body is provided by the subclass.

```
abstract class Animal {
```

```
    public abstract void animalSound();
```

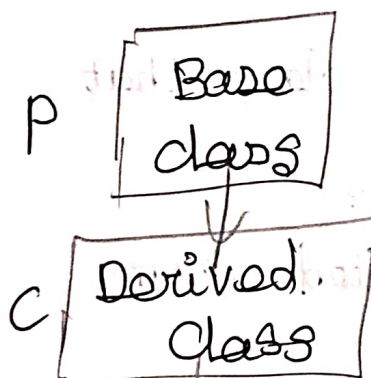
```
}
```



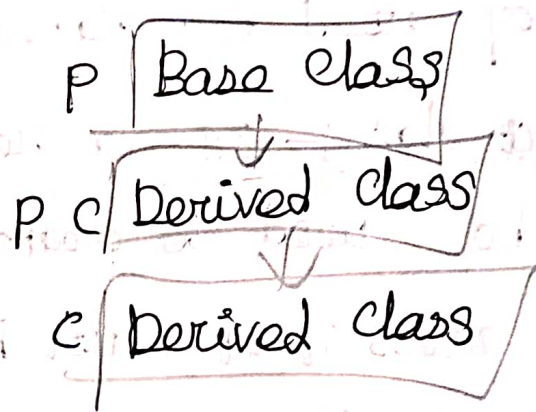
# Multiple and Multilevel Inheritance

Key difference b/w these two is that multiple inheritance is when a class inherits from many base classes while multilevel inheritance is when a class inherits from a derived class making that derived class a base class for a new class.

parent  
child



single level



Multilevel Inheritance

## Multiple Inheritance

↳ When one class extends more than one classes then this is called multiple inheritance. class C extends class A and B then this type of inheritance is known as that. Java doesn't allow Multiple Inheritance.

## 1] Keyword using for inheritance

Extends (extends)

↳ keyword used

It indicates a class is inherited from another class. (public class B extends A

## 8] What is the keyword to connect Interface

Interface must be implemented by another class with implements keyword :

class Cow implements Animal

9] class	Interface
Keyword is create class is "Class"	This keyword is "Interface"
A class can be instantiated objects of a class can be created	An interface cannot be instantiated object cannot be created.
Classes does not support multiple inheritance	Interface supports multiple inheritance.
It can be inherit another class	It cannot be inherit a class



## 10] Abstract class

Abstract class can have abstract and non-abstract methods.

It does not support multiple inheritance.

This is provide implementation of interface.

Keyword is abstract.

Abstract class can be extended using keyword 'extends'.

## Interface

Interface can have only abstract methods.

It can have default and static methods.

It supports multiple inheritance.

Interface can't provide implementation of abstract.

Keyword is interface.

Implements keyword used to implement.