

Theory Based Assignment

Define Inheritance : Explain various types of Inheritance supported by Java.

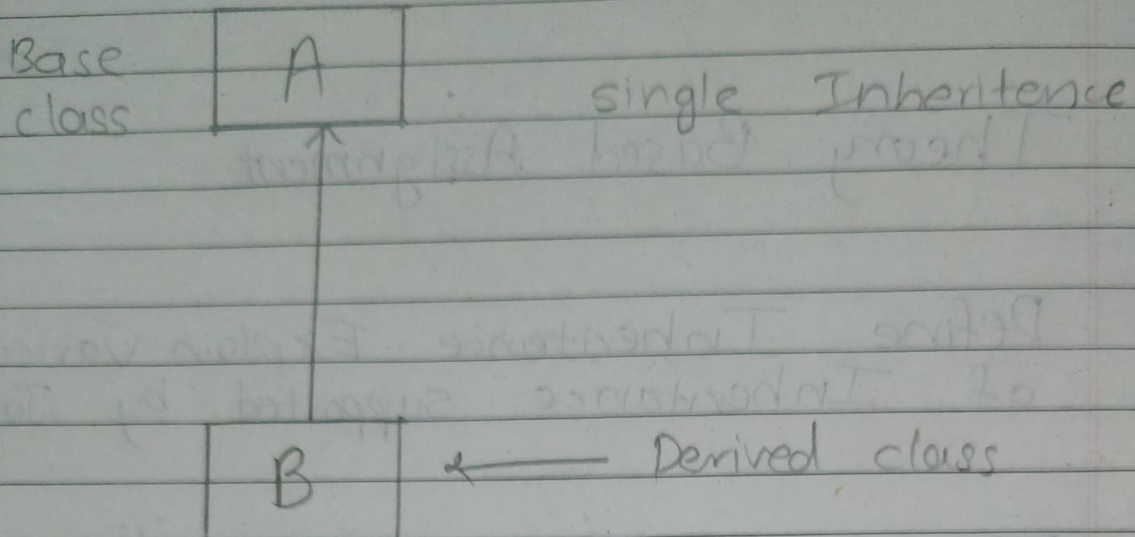
Inheritance:-

- 1) Inheritance is an important pillar of OOP.
- 2) It is the mechanism in by which (java) one class is allowed to inherit the Features of (Fields & methods) of another class.

Types of Inheritance in Java:-

① Single Inheritance:-

In single inheritance, sub classes inherit the Features of one superclass.

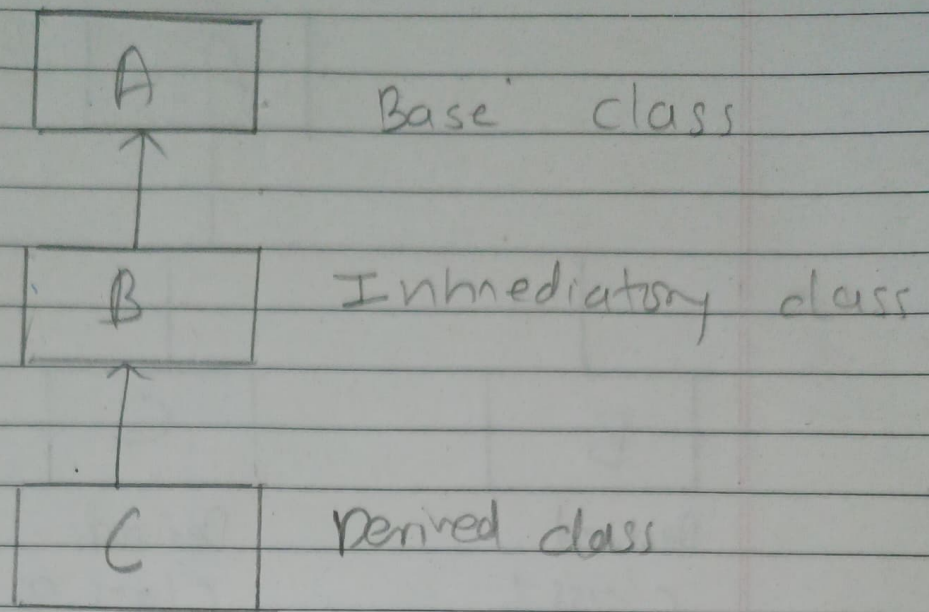


Syntax:-

class B extends class A {

② Multilevel / Inheritance:-

In multilevel inheritance, a derived class will be inheriting a base class and as well as the derived class also acts as a the base class for other classes.



class B extends A {

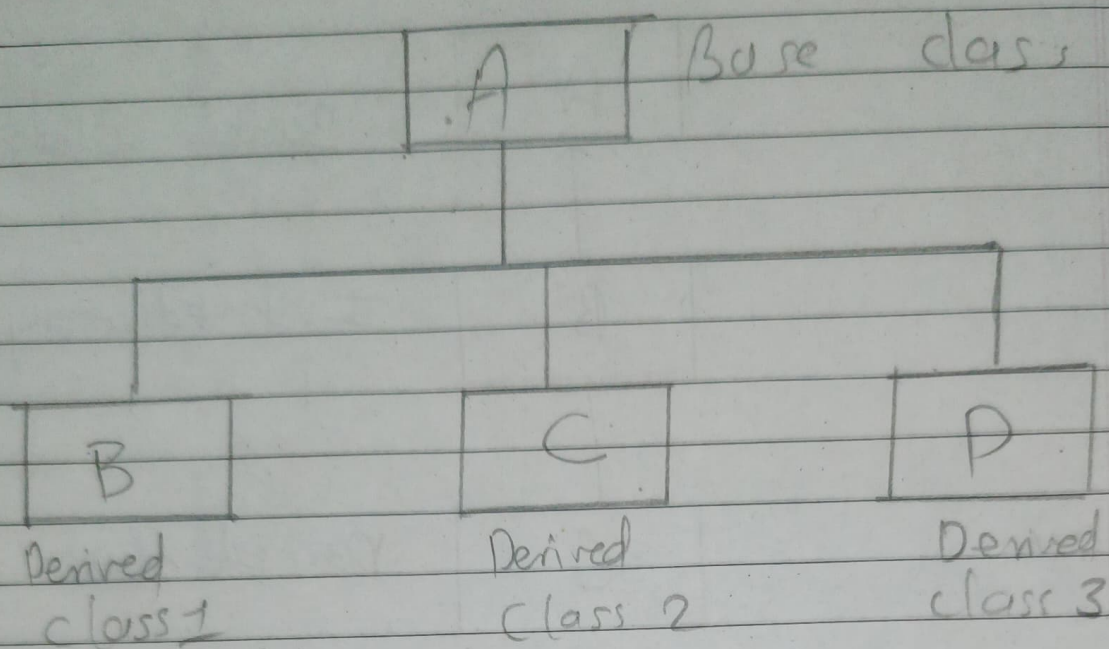
}

class C extends B {

}

③ Hierarchical Inheritance :-

In Hierarchical Inheritance one class serves as a superclass (base class) for more than one subclass.



Syntax:-

```
class A {
```

```
}
```

```
class B extends A {
```

```
}
```

```
class C extends A {
```

```
}
```

```
class D extends A {
```

```
}
```