Object : It is the Intance of Class and also known as the blueprint of Some Class.

Constructor : Is the Same name of Class name known as method help to create a object.

Constructor not having any void and int method, we can use the private and protected message but can not use the int and void functions.

Types of Constructor

1) private

2) default

3) parameterized

4) copy

2. Static : Simple Static method which can not use the name of the method is accessable in the class itself no need to create and object for them / And if static method is also works the same, can able to access with in the class without creating a objects

Overloading method is also available for the Constructor.

3. Instance Block : Only Defined in the Class, not in the method, in instance block you can not defined method only use variables and statements

Instance Block is access before constructor or object call

4. Inheritance : It is the phenomenon of Instance of any Class, that Instance class is able to access all the properties of the main class, and that instance class is known as sub class of the main class.

We Can not access the private members of the class and private method so of the class.

If Super class having 3 methods and , his sub class having the additional 2 new methods then the sub class having total 5 methods. Then if we want to create and object of this class.

Method Overriding is possible in Inheritance only.

Types of Inheritance :

1. Simple Inheritance 2) Multi Level Inheritance 3) Multiple Inheritance 4) Hierarchical Inhertance ( All Inheritance is supported by Java but the Multiple Can Not because Multiple Inheritance Says That two super class having a one Same Sub Class that’s Actually not possible. )

5. What is Instance Variable, Local Variable, derived class, Instance of ??

🡪 Instance Variable is the Variable also Known as the data Members variable which is outside the method and inside the class.

🡪 Local Variable is the Variable used in the Methods and inside the attribute of the methods.

Which can be inside any block ex. Constructor, static,methods,etc.

🡪 Example : Sub Class is the derived class of the Super Class.

When you create an object from a subclass, it is also considered an instance of the superclass. This is because the subclass inherits the characteristics and behaviors of the superclass.

🡪 Example : An Object is the Instance of the Superclass or the Derived class.

6. What is the Meaning of Return type ??

🡪 Example : Return type is void , int, ( Boolean and String also Able to be return type of any methods, that means we can write this word before initialising any method.

7. Important Point is that You can able to take the object Reference as Superclass and able to create Object of the Subclass.

Example : Shape is Super class and Rectangle is Sub class

You can able to make this type of syntax “ *Shape var = new Rectangle();* ”

However, you cannot directly access any additional methods or fields that are specific to the subclass. You are only able to access the Same methods in the superclass and subclass. But if you use the reference of the Subclass and

8. “ @Override ” is the Optional annotation, if you want to skip you can but prefer to use to increase compile safety and code run faster and clearing that the method is indeed the Overridden method and increase Readability.

Important that Superclass is never “ @Override ” only Subclass would be written, not a Superclass method otherwise its thrown an error.

9. Encapsulation is the combination of Data Hiding and Abstraction.

Variable should be private , Class Method Should be the Public so we can able to access those variable. In short, In capsulation we are wrapping the Variables and Methods in a Single Unit.

In this we use Setter() and Getter() Method.

10. Abstraction is a process of hiding the implementation details from the users, only highlighted set of service is provided to the user.

Example. In Excel we do sum() or too many things we can able to see the code but we can use the that set of code.

Example : It is able to Secure the Data and Also Able to Enhance the Data and the Code. If We want to replace the Code into Another Code we can { any other language of code }.

There are two type of Abstraction Implementation is Used in this,

1. Abstract Class ( 20 %v by Service provider, 80 %v by Users, Example Excel )
2. Interface ( Total Work Done by Developer Only )

We use @Override method also in it.