1. What is inheritance in java?

* Inheritance in java is a mechanism in which one object can acquires all the properties and behaviors of parents class
* The idea behind inheritance in java is that we can create new classes that are built upon existing classes, when we inherit from an existing class, we can reuse method and fields of parents class, and we can add methods and fields also
* Also inheritance represents is a relationship, also known as parent-child relationship

1. Why use inheritance in java?

* For method overriding(that way we can achieved runtime polymorphism)
* For code reusability

1. Why constructor can’t be inherited in java?

* A subclass inherits all the (fields, methods, and nested classes) from its super class, but constructor is not members, so they are not inherited by subclass. But the constructor of the super class can be invoked from the subclass

1. Is it possible to call parents class constructor from child class?

* Yes, we can do using super keyword into child class default constructor
* Whenever you have to defined the constructor in parent’s class, then your child class constructor explicitly has to call to parent’s class constructor, otherwise we will get compiler error

1. Is it possible to access Static variable or static method from child class to parent class

* Yes, because of static variable or static method is class member

1. Is it possible to make the reference of parent’s class from your subclass?

* Yes, we can make the reference, but when we make the reference of parent’s class we can’t call the child class member, we can call only parent’s class method
* But when we will make the reference of child class we can call all the child class methods as well as parent’s class methods.

1. Is it possible to access the modifier in inheritance?

* Private access modifier we can’t Inheritance from child class
* Inheritance form different class we can call only public and protected, we can’t access private and default modifier.

1. What are the different types of inheritance in java?

* Single: when a class extends another class (only one class) then we call it as single inheritance.
* Multiple: multiple inheritance is nothing but one class extending more than one class
* Multilevel: in multilevel inheritance a derived class will be inheriting a parent class and as well as the derived class act as the parent class to other class
* Hierarchical: in hierarchical inheritance one parent class is inherited by many sub classes.