**Practical 7 Questions**

**Q1. What is inheritance ? Explain with example?**

* **Acquiring/Inheriting properties/attributes of a class.**
* **It is the mechanism by which one class is allowed to inherit the features of another class**
* **Class super {…}**
* **Class subclass extends super{…}**

**Q2. What are the advantages of inheritance concept?**

* **Inheritance supports the concept of “reusability”, i.e., when we want to create a new class and there is already a class that includes some of the code that we want, we can derive our new class from the existing class. By doing this, we are reusing the fields and methods of the existing class.**

**Q3. How to define super class and sub class?**

* **Class super {…}**
* **Class subclass extends super{…}**

**Q4. What are the different types of inheritance in Java?**

* **1. Single inheritance**
* **2. Multilevel inheritance**
* **3. Hierarchial inheritance**

**Q5. What is the use of super keyword in Java?**

* **We can use super keyword to call super class constructor**
* **Using super for data member**
* **Using super for methods**

**Q6. How to perform multiple inheritance in java?**

* **In java programming, multiple and hybrid inheritance is supported through interface only.**
* **A superclass can have any number of subclasses. But a subclass can have only one superclass. This is because Java does not support multiple inheritances with classes. Although with interfaces, multiple inheritances are supported by java.**

**Table

Description automatically generated with medium confidenceQ7. What is the difference between method overloading and method overriding?**

**Q8. How to invoke super class constructor using subclass object?**

* **Use super keyword to call super class constructor from the subclass constructor**

**Q9. What is the difference between this and super keyword?**

* **In java super is used to access methods/constructors/members of the parent class/super class**
* **While this is used to access methods/constructors/members of the current class**

**Q10. What happens when we declare method and class as abstract?**

* **An abstract class is a class that is declared with an abstract keyword.**
* **An abstract method is a method that is declared without implementation.**
* **An abstract class may or may not have all abstract methods. Some of them can be concrete methods.**
* **A method-defined abstract must always be redefined in the subclass, thus making overriding compulsory or making the subclass itself abstract.**
* **Any class that contains one or more abstract methods must also be declared with an abstract keyword.**
* **There can be no object of an abstract class. That is, an abstract class can not be directly instantiated with the new operator.**
* **An abstract class can have parameterized constructors and the default constructor is always present in an abstract class.**