**Comsats University Islamabad**

**Abbottabad Campus**

**Design Pattern**

**BSE 7B**

**Lab Task 2**

**MUHAMMAD TALAH KHAN**

**FA20-BSE-042**

**Sir Mukhtiar Zamin**

**Date: 15/9/2023**

1. Overloading of main method is possible or not?

* Yes it is possible to overload main method in java. In java, we can have many overloaded main methods.

1. What are the six ways to use this keyword?

* This keyword can be used to get current object.
* This keyword can be used to invoke current object’s method.
* This keyword can be used to invoke current class constructor.
* This keyword can be passed as a parameter to a constructor.
* This keyword can be passed as a parameter to a call method.
* This keyword can be used to return the current object from the method.

1. How down casting is possible in java?

* Downcasting in Java is the process of converting an object of a subclass to an object of its superclass. This can be done explicitly, by using the downcast() keyword, or implicitly, by using the instanceof() operator.

1. What is the purpose of private constructor?

* Private constructors are used to prevent creating instances of a class when there is no instance field or methods.it can be used in restricting object creation as well. If a constructor is declared private, then its objects are only accessible from within the declared class.

1. How to override static method?

* Static methods cannot be overridden since they are bonded at compile time and method overriding relies on dynamic binding at runtime. The calling of method depends upon the type of object that calls static method.