

Student Name: Chetan Ingale

PRN No.: 221111030

Course Name: C.S.E. (IoT CS BC)

Course code: CSL304

Year: S.E.

Semester: 3

Roll No.: 17

## Experiment Evaluation Sheet

Experiment No.: 9

Experiment Name:  
Program using super keyword

Sr No.	Evaluation Criteria	Marks (Out of 9)	Performance Date	Correction Date and Signature of Instructor
1	Experiment Performance			
2	Journal Performance			
3	Punctuality			
Total				

**Aim :** Program using super keyword

**Software required :** Java, Javac.

## **Theory :**

### **Super Keyword in Java :-**

The super keyword in Java is a reference variable which is used to refer immediate parent class object.

Whenever you create the instance of subclass, an instance of parent class is created implicitly which is referred by super reference variable.

### **Usage of Java super Keyword :**

- 1) super can be used to refer immediate parent class instance variable.
- 2) super can be used to invoke immediate parent class method.
- 3) super() can be used to invoke immediate parent class constructor.

## **Code 9.a :**

```
class veh{
    int maxsp = 120;
}
class car extends veh{
    int maxsp = 1000;
    void display(){
        System.out.println("max speed:"+ super.maxsp);
    }
}
class supers{
    public static void main(String[] args) {
        car c = new car();
        c.display();
    }
}
```

## **Output 9.a :**

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ javac supers.java
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ java supers
max speed:120
```

## **Code 9.b :**

```
class Person{
    void message(){
        System.out.println("Person class");
    }
}
class student extends Person{
    void message(){
        System.out.println("Student Class");
    }
    void display(){
```

```
        message();
        super.message();
    }
}
class method{
    public static void main(String[] args) {
        student s = new student();
        s.display();
    }
}
```

**Output 9.b :**

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ javac method.java
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ java method
Student Class
Person class
```

**Code 9.c :**

```
class per{
    per(){
        System.out.println("person class constructor");
    }
}
class student extends per{
    student(){
        super();
        System.out.println("student class constructor");
    }
}
class person {
    public static void main(String[] args) {
        student s = new student();
    }
}
```

**Output 9.c :**

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ javac person.java
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp09$ java person
person class constructor
student class constructor
```

**Conclusion :**

With this experiments we learn how to implement super keyword in java programming language.