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| *A close up of a logo  Description automatically generated* | *DEPARTMENT OF COMPUTER ENGINEERING* |

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| Semester | S.E. Semester III – Computer Engineering |
| Subject | Object Oriented Programming Using Java (Skill Based Lab) |
| Subject Professor In-charge | Prof. Indu Anoop |
| Laboratory | Online Lab |

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| Roll Number | 20102A0004 | |
| Grade and Subject Teacher’s Signature |  |  |

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| Experiment | 11 | |
| Problem Statement | To demonstrate Super and Final keyword | |
| Resources / Apparatus Required | Hardware: Computer System | Software: jdk 1.8, Eclipse / Notepad++/IntelliJ IDEA |
| Details | Super Keyword:-  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.  Final Keyword:-  The final keyword in java is used to restrict the user. The java final keyword can be used in many context :  1. variable  2. method  3. class  The final keyword can be applied with the variables, a final variable that have no value it is called blank final variable or uninitialized final variable. It can be initialized in the constructor only. | |
| Code | Final Keyword:  class Bike {    final void run(){  System.out.println("running");  }  }  class Honda extends Bike {  final int speedlimit=90;//final variable  //Compile Time Error happens as a final method cannot be overridden in the child class  void run(){  System.out.println("running safely with 100kmph");  }  void changeSpeed(){  speedlimit=120;//Compile Time Error as speedlimit variable is declared final thus it is a constant whose value cannot be changed  }  public static void main(String args[]) {  Honda honda= new Honda();  honda.run();  }  }  Super Keyword:  class Animal{  void eat(){System.out.println("eating...");}  }  class Dog extends Animal{  void eat(){System.out.println("eating bread...");}  void bark(){System.out.println("barking...");}  void work(){  super.eat();  bark();  }  }  class TestSuper2{  public static void main(String args[]){  Dog d=new Dog();  d.work();  }} }  } | |
| Output | For Final:    For Super: | |
| Conclusion | Thus, we could successfully implement super and final keywords in our program | |