# Laboratory 4

Title of the Laboratory Exercise: Overloading, Inheritance and Overriding

1. Introduction and Purpose of Experiment

Students apply object oriented programming concepts including Overloading, Inheritance and Overriding to solve problems.

1. Aim and Objectives

Aim

To apply object oriented programming concepts including Overloading, Inheritance and Overriding to solve problems

Objectives

At the end of this lab, the student will be able to

* Apply Overloading, Inheritance and Overriding for solving problems
* Express solutions in Java language
* Use Netbeans IDE

1. Experimental Procedure

For the problems listed below, design the data structures, algorithm(s) and write the program(s). Tabulate the output for various inputs and verify against expected values. Compare the programming method in Java with C programming languages. Describe your learning along with the limitations of overall approach if any. Suggest how these can be overcome.

a. Write a program to develop a game for the scenario posed:

In ACME organization, there are many employees. All employees have first name, last name and aadhar number. ACME organization creates its own products and sells them. There are two types of sales employees: Commission employee are paid a percentage share (known as commission rate) of their gross sales. Base plus commission employee is a second type of sales employee who is paid a basic salary along with the commission. Other types of Employees include salaried employees who get paid a fixed weekly salary, piece workers who get paid a preset per piece amount based on the number of pieces they produce and hourly wage employees who get paid an hourly wage. Hourly wage employees also get 1.5 times the hourly wage for hours worked over 40 hours. Create a Java program to calculate salary of an employee in ACME organization.

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| **Documentation:** | |
| a. Procedure and Algorithm(s): |  |
| b. Conclusions : |  |

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| **Results and Discussions:** |
| **Screenshot:** |
| **Discussion:** |