



Vidyavardhini's College of Engineering and Technology

Department of Artificial Intelligence & Data Science

Course Outcome 1 : Understand and apply the fundamentals of Java Programming and Object-Oriented Programming.

Experiment 02 : Programs on method and constructor overloading.

Problem Statement:

Write a Java program to create a class called **Calculator** that demonstrates:

1. **Constructor Overloading** — define two constructors:
 - One default constructor that prints a welcome message.
 - One parameterized constructor that takes two numbers and displays their sum.
2. **Method Overloading** — create a method **add()** with:
 - No parameters (adds two default numbers 5 and 10).
 - Two integer parameters (adds two integers passed to it).
 - Three float parameters (adds three floats passed to it).

In the **main** method, create objects of **Calculator** using both constructors and call the overloaded **add()** methods to display results.

Expected Output Example:

Sum of 15 and 25 is: 40

Sum of default numbers 5 and 10 is: 15

Sum of 20 and 30 is: 50

Sum of 12.5, 15.5 and 10.0 is: 38.0

Constructor Overloading:

Two constructors are defined — one default and one parameterized.

Method Overloading:

add() method is overloaded with:

- No parameters.
- Two integer parameters.
- Three float parameters.

In **main()** method:

Both constructors and the overloaded methods are called to demonstrate their behavior.