

## OOPJ Assignment-4 (Unit-2)

```
//This is lecture program for 17/02/2025 [just for Reference]
//Static Method Concept
import java.util.Scanner;
class MyNewClass{
    int a,b;
    void add3(int a,int b){//diff class non-static meth
        System.out.println("add3:"+ (a+b));
    }
    static void add4(int a,int b){//diff class static meth
        System.out.println("add4:"+ (a+b));
    }
}
public class StaticMethDemo {

    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter 2 no.");
        int a=sc.nextInt();
        int b=sc.nextInt();
        StaticMethDemo sm=new StaticMethDemo();
        sm.add1(a,b);//static meth can't call non-static w/o obj
        add2(a, b);//static meth can call other static meth w/o obj
        MyNewClass nc=new MyNewClass();
        nc.add3(a, b);//call diff class non-static meth with obj
        MyNewClass.add4(a,b);//call static meth of diff cl with class reference

    }
    //main
    void add1(int a,int b){//same class non-static meth
        System.out.println("add1:"+ (a+b));
    }
    //add1
    static void add2(int a,int b){//same class static meth
        System.out.println("add2:"+ (a+b));
    }
}
```

### Assignment-4:

Kindly refer previous program.

#### Program-1: Static Method

Write a java program to calculate area of a circle for given radius (radius will be entered by user). Create two class CircleMain.java & Circle.java.

Implement following methods in your program:

- 1) void cirArea1(int r);// this is non-static method same class
- 2) void cirArea2(int r);// this is static method same class
- 3) void cirArea3(int r);// this is non-static method different class
- 4) void cirArea4(int r);// this is static method different class

call all 4 methods and print area

#### Program-2: Add the missing code: Static Variable

```
//static variable program
class StudH1{
    String name;
    int roll;
    static String uni;//static variable
    StudH1(String name,int roll, String uni){
        this.name=name;
        this.roll=roll;
        this.uni=uni;
    }
}
```

## OOPJ Assignment-4 (Unit-2)

```
void display1(){
    System.out.println(name+"\t"+roll+"\t"+uni);
}
}
public class StaticVarDemo {
    public static void main(String[] args) {
        StudH1 s1=new StudH1("abc",111,"DU");
        StudH1 s2=new StudH1("pqr",222,"DU");
        StudH1 s3=new StudH1("xyz",333,"DU");

        /* Add the missing code here
        * change the name of s3 to "zzz" instead of "xyz" using object s3.____="zzz"
        * change the uni name to "Darshan" instead of "DU" with class reference & object reference
        * ClassName.____="Darshan"; //Class Ref:is it correct? OR
        * obj.____="Darshan";//Object Ref:is it correct?
        * Note:Observe the output carefully
        */

        s1.display1();
        s2.display1();
        s3.display1();
    }
}
```

**Output:**