

ASSIGNMENT 3

Assignment 3 on Session3: OOPs, Methods and Constructors**Problem Statement1:**

Write a program in Java to show the use of super and this keyword with a constructor, methods, and variables.

Solution:

```
class SupCls
{
    SupCls()
    {
        System.out.println("Super Class default constructor");
    }
    SupCls(int a) // used to invoke current object class constructor
    {
        this();
        System.out.println("Super Class with Integer");
    }
}

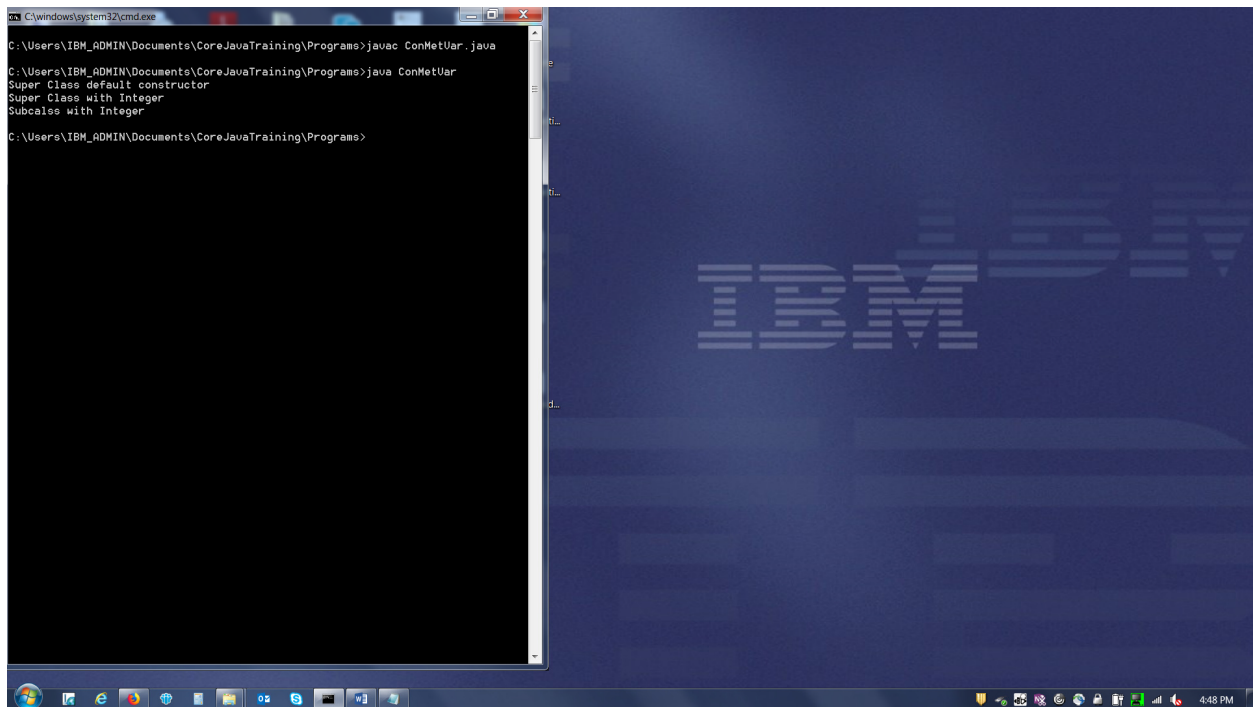
class ConMetVar extends SupCls
{
    ConMetVar(int i) // super is used to invoke the super class constructor
    {
        super(i);
        System.out.println("Subcalss with Integer");
    }
    public static void main(String[] k)
    {
```

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```
ConMetVar t = new ConMetVar(1);  
}  
}
```

Explanation of the code:

Result flow & Screen shot:



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Problem Statement2:

Create a class Student which has some private data like name, phone number, roll number, class, use getter and setters to access this private data.

Solution:

```
public class StudentGetSet
{
    public static void main(String a[])
    {
        Student stud= new Student();
        stud.setName("Jesu Albert");
        stud.setPhoneNumber(1234567890);
        stud.setRollNumber("080424");
        stud.setStandard("XII");

        System.out.println("This program is to explain the use of Getter and Setter method");
        System.out.println(stud.getName()+" Student Record");
        System.out.println("Student Name: "+stud.getName());
        System.out.println("Roll Number: "+stud.getRollNumber());
        System.out.println("Phone Number: "+stud.getPhoneNumber());
        System.out.println("Class: "+stud.getStandard());
    }
}

class Student
{
    private String name; //Private data declaration
    private String rollnumber; //Private data declaration
    private int phonenumber; //Private data declaration
    private String standard; //Private data declaration
```

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```
public String getName() //getter method for Name
{
    return name;
}

public void setName(String name) //Setter method Name
{
    this.name = name;
}

public String getRollNumber() //getter method for Roll Number
{
    return rollnumber;
}

public void setRollNumber(String rollnumber) //getter method for Roll Number
{
    this.rollnumber = rollnumber;
}

public int getPhoneNumber() //getter method for Phone Number
{
    return phonenumber;
}

public void setPhoneNumber(int phonenumber) //getter method for Phone Number
{
    this.phonenumber = phonenumber;
}

public String getStandard() //getter method for Class
{
    return standard;
}
```

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```
}  
  
public void setStandard(String standard) //getter method for Class  
{  
    this.standard = standard;  
}  
}
```

Explanation of the code:

Student class is derived with student details as private. Hence to access the private variables the set and get methods are used and through these methods the student details are assigned to accessed.

Result flow and screen shot: