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Subject: DSA

Lab#2 Tasks

➔ Task#1:

Write a program by creating an 'Employee' class having the following methods and print the final salary.

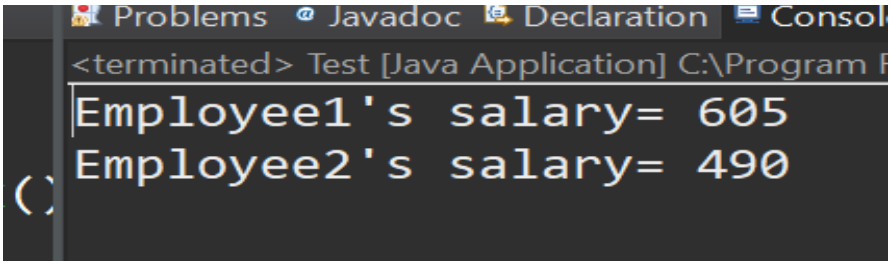
1 - 'getInfo()' which takes the salary, number of hours of work per day of employee as parameter

2 - 'AddSal()' which adds $10 to salary of the employee if it is less than $500.

3 - 'AddWork()' which adds $5 to salary of employee if the number of hours of work per day is more than 6 hours.

```
class Employee {
    private int salary;

    public void getInfo(int salary, int noOfHours) {
        this.salary = salary;
        if (this.salary < 500)
            AddSal();
        if (noOfHours > 6)
            AddWork();
    }

    public void AddSal() {
        salary += 10;
    }

    public void AddWork() {
        salary += 5;
    }

    public int getSalary() {
        return salary;
    }
}

public class Test {

    public static void main(String[] args) {
```

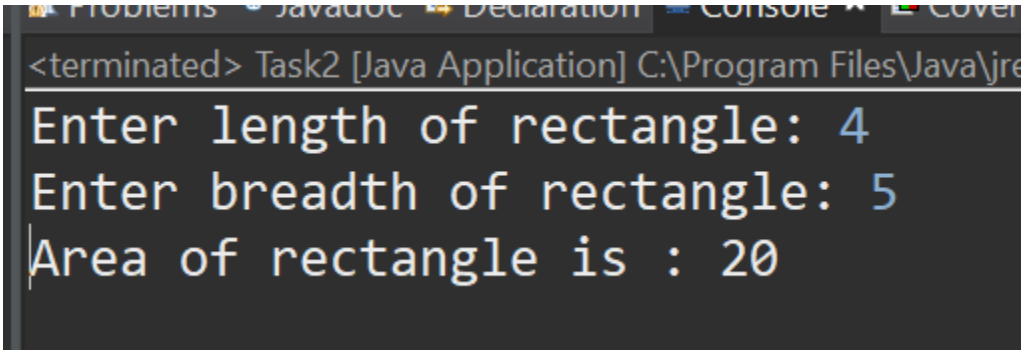
```
        Employee emp1 = new Employee();
        Employee emp2 = new Employee();
        emp1.getInfo(600, 7);
        emp2.getInfo(480, 4);
        System.out.println("Employee1's salary=
"+emp1.getSalary());
        System.out.println("Employee2's salary=
"+emp2.getSalary());

    }

}
```



➔ Task#2:
Write a program to print the area of a rectangle by creating a class named 'Area' having two methods. First method named as 'setDim' takes length and breadth of rectangle as parameters and the second method named as 'getArea' returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

```
import java.util.Scanner;
class Area {
    private int length;
    private int breadth;

    public void setDim(int length, int breadth) {
        this.length = length;
        this.breadth = breadth;
    }
```

```
    public int area() {
        return (length * breadth);
    }
}

public class Task2 {
    public static void main(String[] args) {
        Area obj = new Area();
        System.out.print("Enter length of rectangle: ");
        int length = new Scanner(System.in).nextInt();

        System.out.print("Enter breadth of rectangle: ");
        int breadth = new Scanner(System.in).nextInt();

        obj.setDim(length, breadth);
        System.out.println("Area of rectangle is :
"+obj.area());
    }

}
```

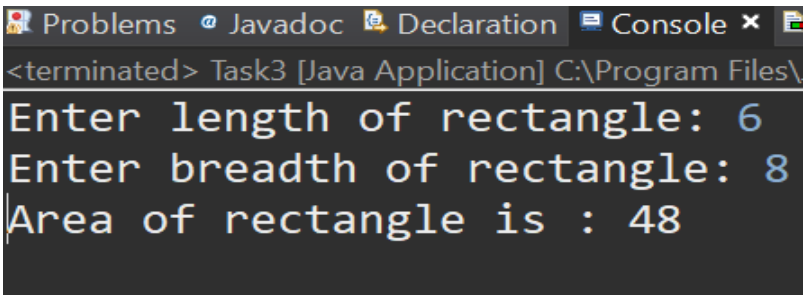


➔ Task#3:

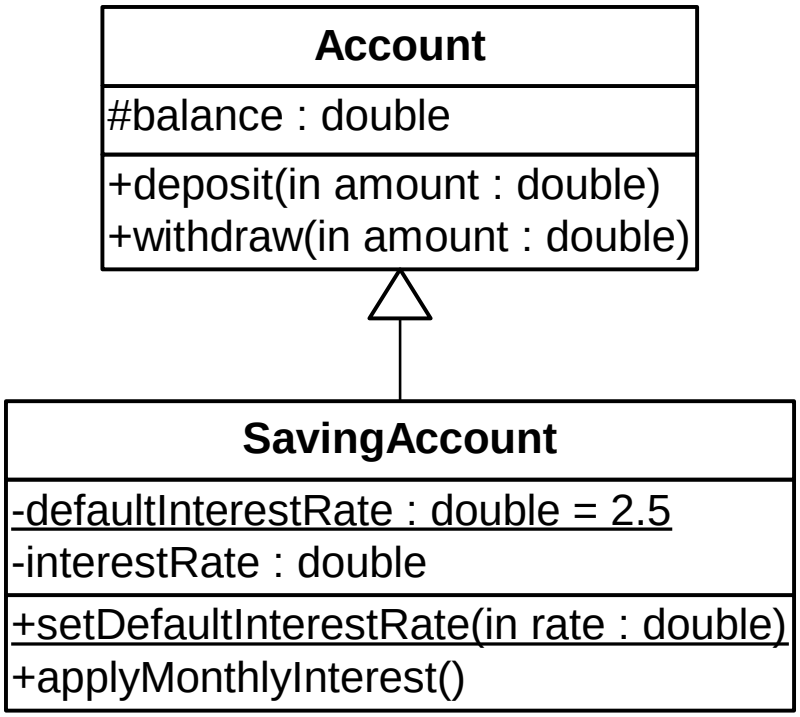
Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a method named 'returnArea' which returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

```
import java.util.Scanner;
```

```java
class Area {
    private int length;
    private int breadth;

    public Area(int length, int breadth) {
        super();
        this.length = length;
        this.breadth = breadth;
    }

    public int returnArea() {
        return (length * breadth);
    }
}

public class Task3 {
    public static void main(String[] args) {

        System.out.print("Enter length of rectangle: ");
        int length = new Scanner(System.in).nextInt();

        System.out.print("Enter breadth of rectangle: ");
        int breadth = new Scanner(System.in).nextInt();

        Area obj = new Area(length, breadth);
        System.out.println("Area of rectangle is : " +
obj.returnArea());
    }

}
```



➔ Task:4: Implement using coding:




```
class Account {
    protected double balance;

    public void deposit(double amount) {
    }

    public void withdraw(double amount) {
    }
}           //class ended
class SavingAccount extends Account{
    private double defaultInterestRate=2.5;
    private double interestRate;

    public void setDefaultInterestRate(double rate) {
    }
    public void applyMonthlyInterest() {
    }
    }        //class ended
```