**Day 16\_Java Assignment**

**1. Problem Description:**

What is Data Hiding?

**2. My Solution:**

* Data hiding is a principle of object-oriented programming that involves keeping an object’s state private and only allowing it to be accessed through public methods.
* In other words, Data hiding in Java refers to the concept of encapsulating data within a class and restricting direct access to it from outside the class. This is typically achieved by declaring the class variables as private and providing public methods (getters and setters) to access and modify the data.

**Example:**

**package** daily\_assesment;

**class** Persons

{

**private** String name;

**private** **int** age;

**public** Persons(String name, **int** age) {

**this**.name = name;

**this**.age = age;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** **int** getAge() {

**return** age;

}

**public** **void** setAge(**int** age) {

**this**.age = age;

}

}

**public** **class** DataHiding {

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

Persons person = **new** Persons("Surya V", 26);

// Accessing and modifying the private data using public methods

System.***out***.println("Name :" + person.getName()); // Accessing data

System.***out***.println("Age :" + person.getAge()); // Accessing data

// Modifying data

person.setName("Virat");

person.setAge(35);

System.***out***.println("Name :" + person.getName());

System.***out***.println("Age :" + person.getAge());

}

}

**Output:**

Name :Surya V

Age :26

Name :Virat

Age :35