**Day 7\_Java Assignment**

**1. Problem Description:**

What is object-oriented programming (OOPs)?

**2. My Solution:**

Object Oriented Programming is a programming methodology based on the concept of objects, which can contain data and code: data in the form of fields, and code in the form of methods.

The four main pillars of Object-Oriented Programming are as follows:

1. Abstraction
2. Encapsulation
3. Inheritance
4. Polymorphism

**Abstraction:**

Abstraction is a process of hiding implementation details and exposes only the functionality to the user.

**Encapsulation:**

Encapsulation is the process of wrapping code and data together into a single unit.

**Inheritance:**

Inheritance is the process of one class inheriting properties and methods from another class in Java.

**Polymorphism:**

Polymorphism is the ability to perform many things in many ways.

**Importance of OOPs:**

1. OOP enhances the code reusability.
2. OOP ease the code maintainability.
3. Improves the developer productivity.