

DAY 25:

ASSIGNMENT 3:

Task 2: Serialization and Deserialization

Serialize a custom object to a file and then deserialize it back to recover the object state.

ANSWER:

```
import java.io.*;

class Person implements Serializable {
    private static final long serialVersionUID = 1L;
    private int age;
    private String name;

    public Person(int age, String name) {
        this.age = age;
        this.name = name;
    }

    public int getAge() {
        return age;
    }

    public String getName() {
        return name;
    }
}

public class SerializationExample {
    public static void main(String[] args) {
        Person person = new Person(20, "Joe");
    }
}
```

```

try {
    // Serialize the object to a file
    FileOutputStream fileOut = new FileOutputStream("person.ser");
    ObjectOutputStream out = new ObjectOutputStream(fileOut);
    out.writeObject(person);
    out.close();
    fileOut.close();
    System.out.println("Serialized data is saved in person.ser");
} catch (IOException i) {
    i.printStackTrace();
}

try {
    // Deserialize the object from the file
    FileInputStream fileIn = new FileInputStream("person.ser");
    ObjectInputStream in = new ObjectInputStream(fileIn);
    Person p2 = (Person) in.readObject();
    in.close();
    fileIn.close();
    System.out.println("Deserialized Person:");
    System.out.println("Age: " + p2.getAge());
    System.out.println("Name: " + p2.getName());
} catch (IOException i) {
    i.printStackTrace();
} catch (ClassNotFoundException c) {
    System.out.println("Person class not found");
    c.printStackTrace();
}
}
}

```