

```

package Day20;

import java.io.*;

// Custom class implementing Serializable interface
class CustomObject implements Serializable {
    private static final long serialVersionUID = 1L; // Required for version control
    private String name;
    private int age;

    // Constructor
    public CustomObject(String name, int age) {
        this.name = name;
        this.age = age;
    }

    // Getters and setters
    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 SerializationDeserialization{
    public static void main(String[] args) {
        // Create an object
        CustomObject obj = new CustomObject("John", 30);

        // Serialize the object
        serializeObject(obj, "serialized_object.ser");

        // Deserialize the object
        CustomObject deserializedObj = deserializeObject("serialized_object.ser");

        // Display the deserialized object
        System.out.println("Deserialized object:");
        System.out.println("Name: " + deserializedObj.getName());
        System.out.println("Age: " + deserializedObj.getAge());
    }

    // Method to serialize an object to a file
    private static void serializeObject(Object obj, String filename) {
        try (ObjectOutputStream oos = new ObjectOutputStream(new
        FileOutputStream(filename))) {
            oos.writeObject(obj);
            System.out.println("Object serialized successfully to " + filename);
        }
    }
}

```

```

    } catch (IOException e) {
        e.printStackTrace();
    }
}

// Method to deserialize an object from a file
private static CustomObject deserializeObject(String filename) {
    CustomObject obj = null;
    try (ObjectInputStream ois = new ObjectInputStream(new
FileInputStream(filename))) {
        obj = (CustomObject) ois.readObject();
        System.out.println("Object deserialized successfully from " + filename);
    } catch (IOException | ClassNotFoundException e) {
        e.printStackTrace();
    }
    return obj;
}
}

```

```

1 package Day20;
2
3 import java.io.*;
4
5 // Custom class implementing Serializable interface
6 class CustomObject implements Serializable {
7     private static final long serialVersionUID = 1L; // Required for version control
8     private String name;
9     private int age;
10
11     // Constructor
12     public CustomObject(String name, int age) {
13         this.name = name;
14         this.age = age;
15     }
16
17     // Getters and setters
18     public String getName() {
19         return name;
20     }
21
22     public void setName(String name) {
23         this.name = name;
24     }
25
26     public int getAge() {
27         return age;
28     }
29

```

Markers Properties Terminal Console Coverage

```

<terminated> SerializationDeserialization [Java Application] C:\Users\Nikita\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_16.0.2.v20
Object serialized successfully to serialized_object.ser
Object deserialized successfully from serialized_object.ser
Deserialized object:
Name: John
Age: 30

```

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