

Create class student class information class implement serializable interface student informations class it has student name age student marks assign values for class members op should be and demonstrate serialization

CODE:

```
package javaapplication12;
```

```
import java.io.*;
```

```
// Define the Student class that implements Serializable
```

```
class Student implements Serializable {
```

```
    private static final long serialVersionUID = 1L; // Version control during serialization
```

```
    // Student details
```

```
    public String name;
```

```
    public String address;
```

```
    public int id;
```

```
    public int age;
```

```
    public String course;
```

```
    public String grade;
```

```
    // Constructor for Student
```

```
    public Student(String name, String address, int id, int age, String course, String grade) {
```

```
        this.name = name;
```

```
        this.address = address;
```

```
        this.id = id;
```

```
        this.age = age;
```

```
        this.course = course;
```

```
        this.grade = grade;
```

```
    }
```

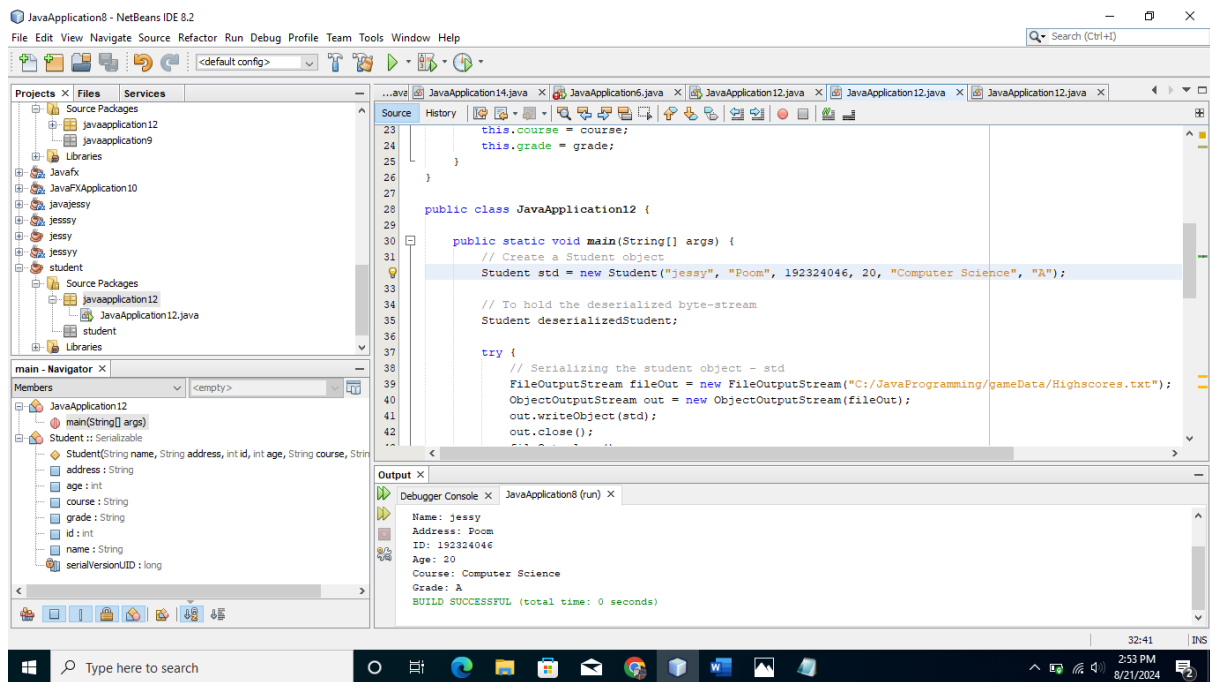
```
}
```

```
public class JavaApplication12 {

    public static void main(String[] args) {
        // Create a Student object
        Student std = new Student("dharumohan", "salem", 192324046,19 , "english", "A");

        try {
            // Serializing the student object - std
            FileOutputStream fileOut = new
FileOutputStream("C:/JavaProgramming/gameData/Highscores.txt");
            ObjectOutputStream out = new ObjectOutputStream(fileOut);
            out.writeObject(std);
            out.close();
            fileOut.close();
            // Serialization complete
            System.out.println("Object serialized successfully.");
        } catch (IOException i) {
            i.printStackTrace();
        }
    }
}
```

OUTPUT:



create class student class information class implement serializable interface student informations class it has student name age student marks assign values for class members op should be and demonstrate **Deserialization**.

CODE:

```
package javaapplication177;
```

```
import java.io.*;
```

```
// Define the Student class that implements Serializable
```

```
class Student implements Serializable {
```

```
    private static final long serialVersionUID = 1L; // Version control during serialization
```

```
// Student details
```

```
    public String name;
```

```
    public String address;
```

```
    public int id;
```

```
    public int age;
```

```
    public String course;
```

```
    public String grade;
```

```
}
```

```
public class JavaApplication177 {

    public static void main(String[] args) {
        // To hold the deserialized byte-stream
        Student deserializedStudent;

        try {
            // Deserialization process

            FileInputStream fileIn = new
FileInputStream("C:/JavaProgramming/gameData/Highscores.txt");

            ObjectInputStream in = new ObjectInputStream(fileIn);

            // Deserialization
            deserializedStudent = (Student) in.readObject();
            in.close();
            fileIn.close();

            // Printing the deserialized object
            System.out.println("Deserialized Student...");
            System.out.println("Name: " + deserializedStudent.name);
            System.out.println("Address: " + deserializedStudent.address);
            System.out.println("ID: " + deserializedStudent.id);
            System.out.println("Age: " + deserializedStudent.age);
            System.out.println("Course: " + deserializedStudent.course);
            System.out.println("Grade: " + deserializedStudent.grade);
        } catch (IOException i) {
            i.printStackTrace();
        } catch (ClassNotFoundException c) {
            System.out.println("Class not found");
        }
    }
}
```

```

        c.printStackTrace();
    }

}

}

```

OUTPUT:

