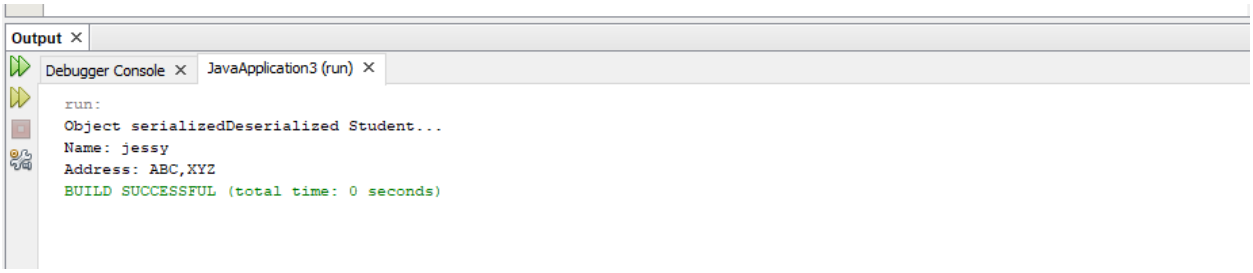
21/08/24

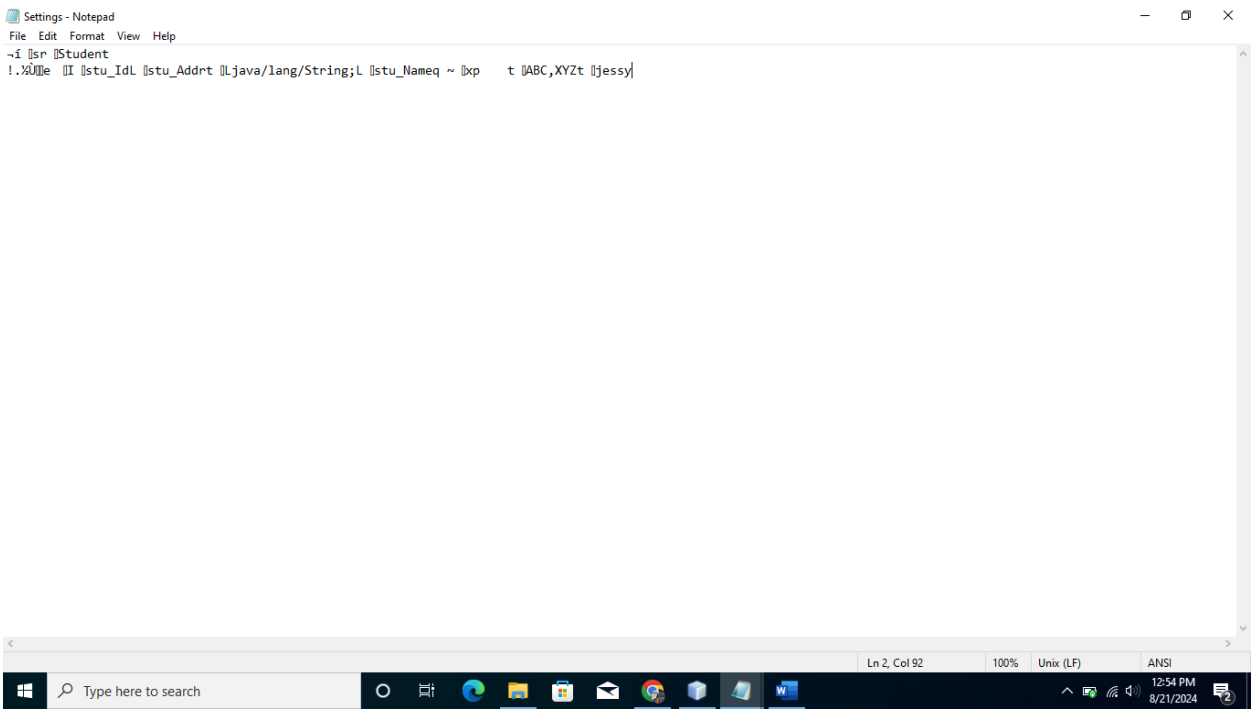
1) Serialized Deserialized

```
import java.io.*;


public class Student implements java.io.Serializable {


  public String stu_Name;

  public String stu_Addr;

  public int stu_Id;


  public static void main(String[] args) {

   // Create a Student object.

   Student std = new Student();

   std.stu_Name = "jessy";

   std.stu_Addr = "ABC,XYZ";

   std.stu_Id = 2;


   // To hold the deserialized byte-stream

   Student deserializedStudent;

   try {

    // Serializing the student object - std

    FileOutputStream fileOut = new
FileOutputStream("C:\\JavaProgramming\\gameData\\Settings.txt");

    ObjectOutputStream out;

     out = new ObjectOutputStream(fileOut);

    out.writeObject(std);
```

```
  out.close();
  fileOut.close();
  // Serialization complete
  System.out.printf("Object serialized");

  // Deserialization process
  FileInputStream fileIn = new FileInputStream("C:\\JavaProgramming\\gameData\\Settings.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.stu_Name);
  System.out.println("Address: " + deserializedStudent.stu_Addr);
 } catch (IOException i) {
  i.printStackTrace();
 } catch (Exception e) {
  System.out.println("Class not found");
  e.printStackTrace();
  return;
 }
```

```
 }


}
```



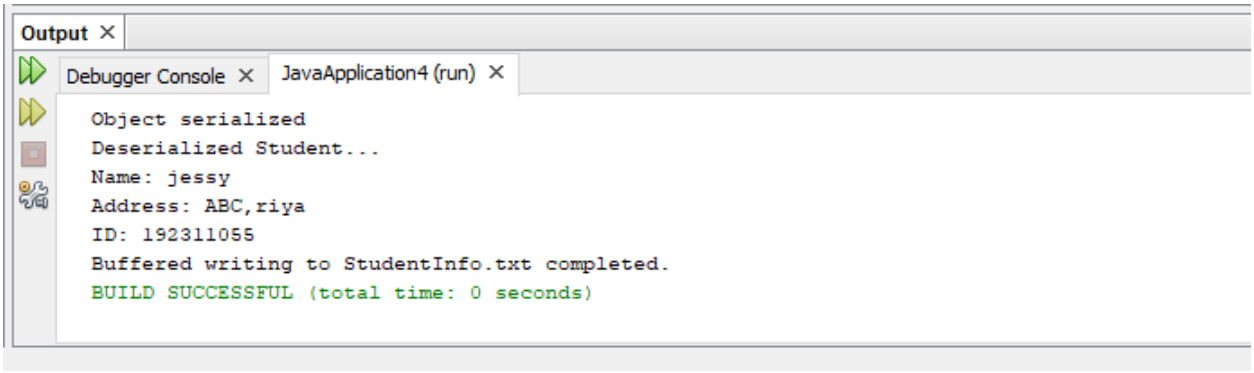


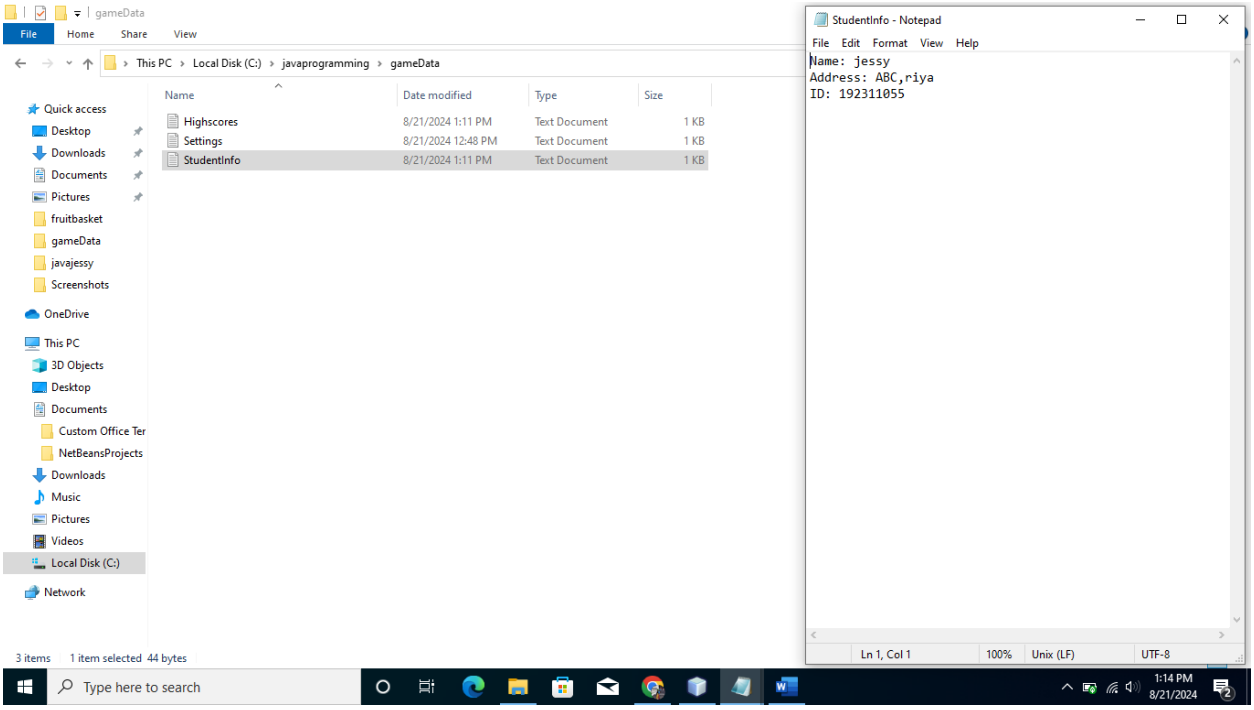
2)

```
package javaapplication14;


import java.io.*;

class Student implements java.io.Serializable {

    public String stu_Name;
```

```
    public String stu_Addr;
    public int stu_Id;
}

public class JavaApplication14 {

    public static void main(String[] args) {
        Student std = new Student();
        std.stu_Name = "jessy";
        std.stu_Addr = "ABC,riya";
        std.stu_Id = 192311055;
        Student deserializedStudent;

        try {

            FileOutputStream fileOut = new
FileOutputStream("C:/JavaProgramming/gameData/Highscores.txt");
            ObjectOutputStream out = new ObjectOutputStream(fileOut);
            out.writeObject(std);
            out.close();
            fileOut.close();
            System.out.printf("Object serialized\n");
            FileInputStream fileIn = new FileInputStream("C:/JavaProgramming/gameData/Highscores.txt");
            ObjectInputStream in = new ObjectInputStream(fileIn);
            deserializedStudent = (Student) in.readObject();
            in.close();
```

```
            fileIn.close();
            System.out.println("Deserialized Student...");
            System.out.println("Name: " + deserializedStudent.stu_Name);
            System.out.println("Address: " + deserializedStudent.stu_Addr);
            System.out.println("ID: " + deserializedStudent.stu_Id);
            try (BufferedWriter bufferedWriter = new BufferedWriter(new
FileWriter("C:/JavaProgramming/gameData/StudentInfo.txt"))) {
                bufferedWriter.write("Name: " + deserializedStudent.stu_Name + "\n");
                bufferedWriter.write("Address: " + deserializedStudent.stu_Addr + "\n");
                bufferedWriter.write("ID: " + deserializedStudent.stu_Id + "\n");
            }
            System.out.println("Buffered writing to StudentInfo.txt completed.");

        } catch (IOException i) {
            i.printStackTrace();
        } catch (ClassNotFoundException c) {
            System.out.println("Class not found");
            c.printStackTrace();
        }
    }
}
```


Output
Debugger Console
JavaApplication4 (run)
Object serialized
Deserialized Student...
Name: jessy
Address: ABC,riya
ID: 192311055
Buffered writing to StudentInfo.txt completed.
BUILD SUCCESSFUL (total time: 0 seconds)


gameData
File
Home
Share
View
This PC
Local Disk (C:)
javaprogramming
gameData
Quick access
Desktop
Downloads
Documents
Pictures
fruitbasket
gameData
javajessy
Screenshots
OneDrive
This PC
3D Objects
Desktop
Documents
Custom Office Ter
NetBeansProjects
Downloads
Music
Pictures
Videos
Local Disk (C:)
Network
Name
Date modified
Type
Size
Highscores
8/21/2024 1:11 PM
Text Document
1 KB
Settings
8/21/2024 12:48 PM
Text Document
1 KB
StudentInfo
8/21/2024 1:11 PM
Text Document
1 KB
3 items
1 item selected 44 bytes
StudentInfo - Notepad
File Edit Format View Help
Name: jessy
Address: ABC,riya
ID: 192311055
Ln 1, Col 1
100%
Unix (LF)
UTF-8
Type here to search
1:14 PM
8/21/2024