Lab 23 – Assignment

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1) Write a program to read and write object to the file. the object need to store bookinfo eg: bookid, title, author ,store and retieve few objects to the file.

```
package com.wrapperclass.examples;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;
import java.io.Serializable;
class BookInfo implements Serializable {
    int bookId;
    String title;
    String author;
    public BookInfo(int bookId, String title, String
author) {
        this.bookId = bookId;
        this.title = title;
        this.author = author;
    }
}
public class ObjectSerialization {
     public static void writeToFile(BookInfo book,
String filePath) {
            try (ObjectOutputStream outputStream = new
ObjectOutputStream(new FileOutputStream(filePath))) {
                outputStream.writeObject(book);
                System.out.println("Object written to
file successfully.");
            } catch (IOException e) {
```

```
e.printStackTrace();
            }
        }
        public static BookInfo readFromFile(String
filePath) {
            try (ObjectInputStream inputStream = new
ObjectInputStream(new FileInputStream(filePath))) {
                return (BookInfo)
inputStream.readObject();
            } catch (IOException |
ClassNotFoundException e) {
                e.printStackTrace();
            return null;
        public static void main(String[] args) {
            // Create a BookInfo object
            BookInfo bookToStore = new BookInfo(1, "The
Great Gatsby", "F. Scott Fitzgerald");
            // Write the object to a file
            writeToFile(bookToStore, "book.ser");
            // Read the object from the file
            BookInfo retrievedBook =
readFromFile("book.ser");
            // Display retrieved object
            if (retrievedBook != null)
                System.out.println("Book ID: " +
retrievedBook.bookId +", Title: " + retrievedBook.title
+", Author: " + retrievedBook.author);
}
```

Output:

```
1 package com.wrapperclass.examples;
      3 import java.io.FileInputStream;
      4 import java.io.FileOutputStream;
      5 import java.io.IOException;
       6 import java.io.ObjectInputStream;
       7 import java.io.ObjectOutputStream;
      8 import java.io.Serializable;
№10 class BookInfo implements Serializable {
  11
                            int bookId;
  12
                             String title;
  13
                         String author;
  14
  15⊜
                   public BookInfo(int bookId, String title, String author) {
  16
                                           this.bookId = bookId;
  17
                                             this.title = title;
  18
                                             this.author = author;

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Object written to file successfully.
Book ID: 1, Title: The Great Gatsby, Author: F. Scott Fitzgerald
```