

```
import java.util.*;  
/**  
 * A class that stores the details of the physical book in the library.  
 *  
 * @author Deepak  
 * @version 30.11.2023  
 */  
public class PhysicalBook extends Library  
{  
    //instance variables  
    private String isbn;  
    private String bookTitle;  
    private Author author;  
    private LibraryMember libMember;  
    private ArrayList<String> damages;  
  
    /**  
     * Constructor for class PhysicalBook objects.  
     */  
    public PhysicalBook(Author auth, String isbnnumber, String bTitle)  
    {  
        isbn = isbnnumber;  
        bookTitle = bTitle;  
        author = auth;  
        libMember = null;  
        damages = new ArrayList<>();  
  
    }  
  
    /**  
     * Method to get the ISBN of the book.  
     */  
    public String getIsbn()  
    {  
        return isbn;  
    }  
  
    /**  
     * Setter method for the ISBN of the book.  
     */  
    public void setIsbn(String isbnnumber)  
    {  
        isbn = isbnnumber;  
    }  
  
    /**  
     * Method to get the Title of the book.  
     */  
    public String getBookTitle()  
    {
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        return bookTitle;
    }

    /**
     * Method to set the Title of the book.
     */
    public void setBookTitle(String ttl)
    {
        bookTitle = ttl;
    }

    /**
     * Method to get the author object of the Author class.
     */
    public Author getAuthor()
    {
        return author;
    }

    /**
     * Method to set the author object of the Author class.
     */
    public void setAuthor(Author auth)
    {
        author = auth;
    }

    /**
     * Method to get the LibraryMember object of the LibraryMember class.
     */
    public LibraryMember getLibMember()
    {
        return libMember;
    }

    /**
     * Method to set the LibraryMember object of the LibraryMember class.
     */
    public void setLibMember(LibraryMember libMember)
    {
        libMember = libMember;
    }

    /**
     * Method to get the damages of the book from the ArrayList.
     */
    public ArrayList<String> getDamages()
    {
        return damages;
    }
```

```
/*
 * Method to set the damages of the book in the ArrayList.
 */
public void setDamages(ArrayList<String> damage)
{
    damages = damage;
}

/*
 * Method to add the damages of the book in the ArrayList.
 */
public void addDamage(String damage)
{
    damages.add(damage);
}

/*
 * Method to check if a book is available.
 */
public boolean isAvailable()
{
    return libMember == null;
}

/*
 * Method to print the details of the books.
 */
public void printDetails()
{
    System.out.println("\nTitle: " +bookTitle);
    if (libMember != null)
    {
        System.out.println("Borrowed by: " +libMember.getMemberId());
    }
    else
    {
        System.out.println("Available");
    }

    if (author != null)
    {
        System.out.println("Author: " + author.getAuthorFirstName() +
author.getAuthorSurname());
    }
    else
    {
        System.out.println("Cannot find Author");
    }
}
```

```
    if (!damages.isEmpty())
    {
        System.out.println("Damage to the book: " + damages);
    }
}
```