

Assignment Problem 3

PGDCA II Semester

PS02CDC33: Object Technology

Prof. Priti Srinivas Sajja

Book (Library)

1. Define a class of Book with attribute as follows.

integer No → defines book identification number

String Title → defines name of book

String Author → defines author of book

char Status → Status of book, I for Issued; A for Available.

2. Define at least one constructor having above parameters.

3. Define a void print method in the Book class which prints book data with all details.

4. Define void Issue () and Void Return() to change book status.

5. In the main method, define any 2 books called b1 and b2 as follows.

Book b1= new Book(1, "KBS", "Sajja", 'A');

Book b2= new Book(2, "SAD", "Sajja", 'I');

6. Call methods Issue and Return on both the books.

Solution

```
package book;
```

```
public class Book {
```

```
    int No;    String Title;    String Author;    char Status;
```

```
Book(int No, String Title, String Author, char Status)
```

```
{    this.No = No;
    this.Title = Title;
    this.Author = Author;
    this.Status= Status;
}
```

```
void print()
```

```
{ System.out.println("-----");
  System.out.println("Book No\t Book Title \tAuthor \t\t Status");
  System.out.println("-----");
  System.out.println( No + "\t " + Title + "\t\t" + Author + "\t\t" + Status);
  System.out.println("-----");
}
```

```
void Issue()
```

```
{ System.out.println ("The current status of book is: " + Status);
```

```

        if (Status == 'I') System.out.println ("Already Issued....");
        else { Status= 'I'; System.out. println ("The Book is now Issued...! ");}
    }

```

void Return()

```

{   System.out.println ("The current status of book is: " + Status);
    if (Status == 'A') System.out.println ("Already Returned ....");
    else { Status= 'A'; System.out. println ("The Book is now Returned...! ");}
}

```

public static void main(String[] args) {

```

    Book b1= new Book(1, "KBS", "Sajja", 'A');
    b1.print();
    b1.Issue();
    b1.Return();

    Book b2= new Book(2, "SAD", "Sajja", 'I');
    b2.print();
    b2.Issue();
    b2.Return();
}
}

```

Sample Output

```

-----
Book No      Book Title  Author           Status
-----
1            KBS        Sajja            A
-----

```

```

The current status of book is: A
The Book is now Issued...!
The current status of book is: I
The Book is now Returned...!

```

```

-----
Book No      Book Title  Author           Status
-----
2            SAD        Sajja            I
-----

```

```

The current status of book is: I
Already Issued....
The current status of book is: I
The Book is now Returned...!

```