OBJECT ORIENTED PROGRAMMING LAB

Experiment No: 13

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Aim

Write a program has class Publisher, Book, Literature and Fiction. Read the information and print the details of books from either the category, using inheritance.

Procedure

```
import java.util.Scanner;

class Publisher{
    int publisher_id;
    String publisher_name;

    Publisher(int publisher_id, String publisher_name){
        this.publisher_id= publisher_id;
        this.publisher_name= publisher_name;
    }
}

class Book extends Publisher{

    int book_id;
    String book_name;

    Book(int publisher_id, String publisher_name, int book_id, String book_name) {
        super(publisher_id, publisher_name);
        this.book_id= book_id;
        this.book_name= book_name;
    }
}

class Literature extends Book{

    int literature_id;
    String literature_theme;

    Literature(int publisher_id, String publisher_name, int book_id, String book_name, int literature_id,
String literature_theme) {
```

```java
        super(publisher_id, publisher_name, book_id, book_name);
        this.literature_id= literature_id;
        this.literature_theme= literature_theme;
    }

    void displayDetails() {
        System.out.println("The publisher ID of the book is: " + this.publisher_id);
        System.out.println("The publisher name of the book is: " + this.publisher_name);
        System.out.println("The Book ID of the book is: " + this.book_id);
        System.out.println("The Book name of the book is: " + this.book_name);
        System.out.println("The Literature ID of the book is: " + this.literature_id);
        System.out.println("The Literature theme of the book is: " + this.literature_theme);
    }

}

class Fiction extends Book{

    int fiction_id;
    String fiction_theme;


    Fiction(int publisher_id, String publisher_name, int book_id, String book_name, int fiction_id,
String fiction_theme) {
        super(publisher_id, publisher_name, book_id, book_name);
        this.fiction_id= fiction_id;
        this.fiction_theme= fiction_theme;
    }

    void displayDetails() {
        System.out.println("The publisher ID of the book is: " + this.publisher_id);
        System.out.println("The publisher name of the book is: " + this.publisher_name);
        System.out.println("The Book ID of the book is: " + this.book_id);
        System.out.println("The Book name of the book is: " + this.book_name);
        System.out.println("The Fiction ID of the book is: " + this.fiction_id);
        System.out.println("The Fiction theme of the book is: " + this.fiction_theme);

    }
}
public class BookInheritance {
    public static void main(String[] args) {
        Literature literature= new Literature(1,"Robert Kiyozaki",20,"Rich Dad Poor
Dad",2001,"Drama");
```
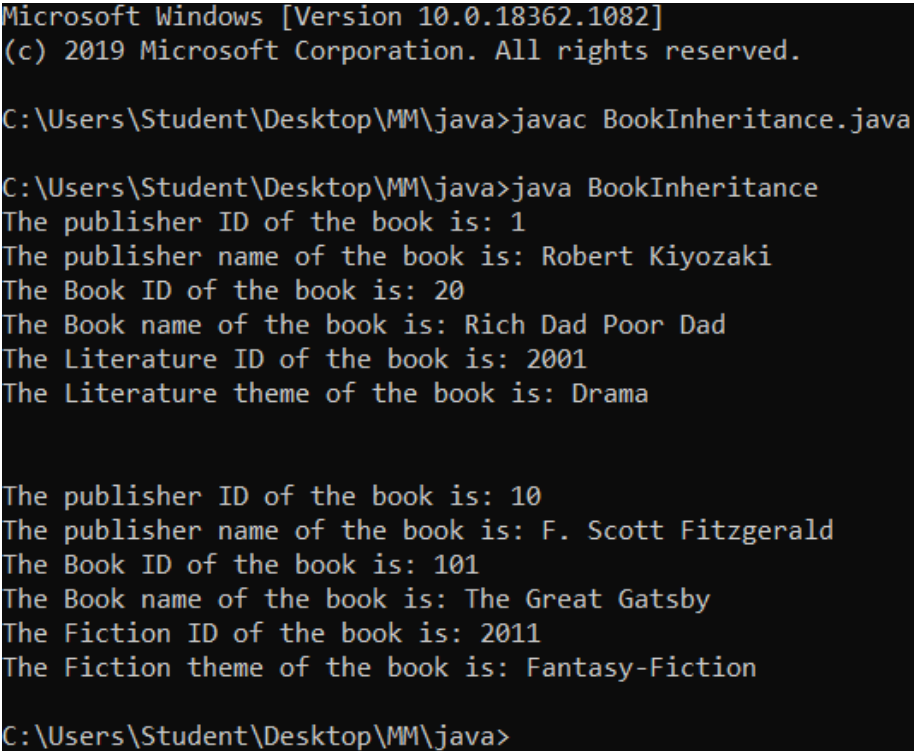
```
        Fiction fiction= new Fiction(10, "F. Scott Fitzgerald", 101, "The Great Gatsby", 2011, "Fantasy-
Fiction");

        literature.displayDetails();

        System.out.println("\n");

        fiction.displayDetails();

    }

}
```

Output Screenshot

```
Microsoft Windows [Version 10.0.18362.1082]
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C:\Users\Student\Desktop\MM\java>javac BookInheritance.java

C:\Users\Student\Desktop\MM\java>java BookInheritance
The publisher ID of the book is: 1
The publisher name of the book is: Robert Kiyozaki
The Book ID of the book is: 20
The Book name of the book is: Rich Dad Poor Dad
The Literature ID of the book is: 2001
The Literature theme of the book is: Drama


The publisher ID of the book is: 10
The publisher name of the book is: F. Scott Fitzgerald
The Book ID of the book is: 101
The Book name of the book is: The Great Gatsby
The Fiction ID of the book is: 2011
The Fiction theme of the book is: Fantasy-Fiction

C:\Users\Student\Desktop\MM\java>
```