LAB_ANP_C6339_CLASSES_ StudenID:AF0339439

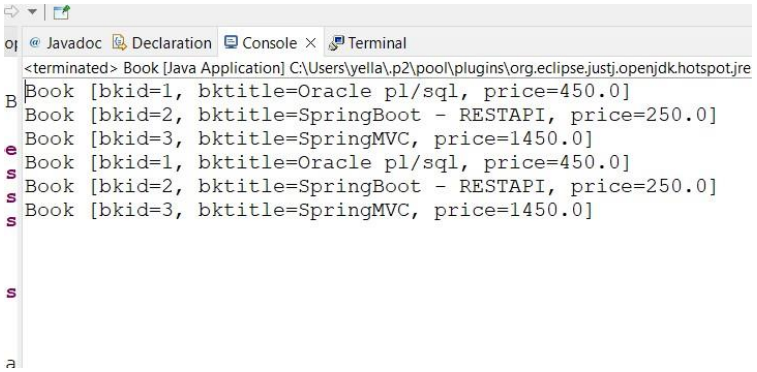
Assignment-1. Create a Book class with bookId, bookName and authorName.Create parameterized constructor to initialize the object. Create an ArrayList of type Book and store all book objects into collections and display all book details. [Hint:Use advanced for loop to display all Books details]

Program:

```
package Collections;
import java.util.*;
public class Book
{

 private int bkid;
 private String bktitle;
 private double price;


 @Override
 public String toString()
 {
      return "Book [bkid=" + bkid + ", bktitle=" + bktitle + ",
price=" + price + "]";
 }

 public Book()
 {
      super();
      // TODO Auto-generated constructor stub
 }

 public int getBkid() {
      return bkid;
 }

 public String getBktitle() {
      return bktitle;
 }

 public double getPrice() {
      return price;
 }

 public void setBkid(int bkid) {
      this.bkid = bkid;
 }
```

```
public void setBktitle(String bktitle) {
	this.bktitle = bktitle;
}

public void setPrice(double price) {
	this.price = price;
}

public Book(int bkid, String bktitle, double price)
{
	super();
	this.bkid = bkid;
	this.bktitle = bktitle;
	this.price = price;
}

public static void main(String[] args)
{

	ArrayList<Book> al = new ArrayList<Book>();

	Book obj1 = new Book(1, "Oracle pl/sql", 450);
	Book obj2 = new Book(2, "SpringBoot - RESTAPI", 250);
	Book obj3 = new Book(3, "SpringMVC", 1450);

	al.add(obj1);
	al.add(obj2);
	al.add(obj3);
	//for each loop
	for(Book b : al)
		System.out.println(b);

	Iterator it = al.iterator();
	//using iterator
	while(it.hasNext())
		System.out.println(it.next());



}

}
```

Output:



Assignment-2. Write a Java program that calculates the sum of all even numbers present in an ArrayList of integers.

Program:

```
package Collections;
import java.util.ArrayList;
public class EvenSumCalculator {
    public static void main(String[] args) {
        // Create an ArrayList of integers
        ArrayList<Integer> numbers = new ArrayList<>();
        numbers.add(1);
        numbers.add(2);
        numbers.add(3);
        numbers.add(4);
        numbers.add(5);
        numbers.add(6);
        numbers.add(7);
        numbers.add(8);
        numbers.add(9);

        // Calculate and print the sum of even numbers
        int evenSum = calculateEvenSum(numbers);
        System.out.println("Sum of even numbers: " + evenSum);
    }

    public static int calculateEvenSum(ArrayList<Integer> numbers)
{
        int evenSum = 0;

        // Iterate through the ArrayList and add even numbers to
the sum
        for (int num : numbers) {
            if (num % 2 == 0) {
                evenSum += num;
            }
        }
```

```
            return evenSum;
        }
    }
```

output: