

Student ID: AF0440950
 Student Name: Madhan. R
 Mail ID: madhanr1603@gmail.com
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1 Create a Book class with bookId, bookName and author Name. 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]

```
import java.util. ArrayList;
```

```
class Book {
    // Declare the properties of the Book class
    private int bookId;
    private String bookName;
    private String author Name;

    // Parameterized constructor to initialize the object
    public Book(int bookId, String bookName, String author Name) {
        this bookId = bookId;
        this bookName = bookName;
        this author Name = author Name;
    }

    // Getter methods (optional, depending on usage)
    public int getBookId() {
        return bookId;
    }

    public String getBookName() {
        return bookName;
    }

    public String getAuthor Name() {
        return author Name;
    }

    // Method to display book details
    public void displayBookDetails() {
        System.out.println("Book ID: " + bookId);
        System.out.println("Book Name: " + bookName);
        System.out.println("Author Name: " + author Name);
        System.out.println("-----");
    }
}

public class BookDetails {
    public static void main(String[] args) {
```

```
// Create an ArrayList of Book objects
ArrayList<Book> bookList = new ArrayList<>();

// Create book objects and add them to the ArrayList
bookList.add(new Book(1, "To Kill a Mockingbird", "Harper Lee"));
bookList.add(new Book(2, "1984", "George Orwell"));
bookList.add(new Book(3, "The Great Gatsby", "F. Scott Fitzgerald"));
bookList.add(new Book(4, "Moby Dick", "Herman Melville"));

// Use an enhanced for loop (advanced for loop) to display all book details
for (Book book : bookList) {
    book.displayBookDetails(); // Display each book's details
}
}
```

```
C:\Users\haris\Desktop\Learning Java>javac BookDetails.java

C:\Users\haris\Desktop\Learning Java>java BookDetails
Book ID: 1
Book Name: To Kill a Mockingbird
Author Name: Harper Lee
-----
Book ID: 2
Book Name: 1984
Author Name: George Orwell
-----
Book ID: 3
Book Name: The Great Gatsby
Author Name: F. Scott Fitzgerald
-----
Book ID: 4
Book Name: Moby Dick
Author Name: Herman Melville
-----
```

2. Write a program to reverse a given List of strings

```
import java.util. ArrayList;
import java.util. Collections;
import java.util. List;

public class ReverseList {
    public static void main(String[] args) {
        // Create a List of strings
        List<String> stringList = new ArrayList<>();

        // Add some strings to the list
        stringList.add("Apple");
        stringList.add("Banana");
        stringList.add("Cherry");
        stringList.add("Date");
    }
}
```

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```
// Print original list
System.out.println("Original List: " + stringList);

// Reverse the list using Collections reverse() method
Collections.reverse(stringList);

// Print reversed list
System.out.println("Reversed List: " + stringList);
}
```

```
C:\Users\haris\Desktop\Learning Java>javac ReverseList.java

C:\Users\haris\Desktop\Learning Java>java ReverseList
Original List: [Apple, Banana, Cherry, Date]
Reversed List: [Date, Cherry, Banana, Apple]
```