Problem – 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.

Code:

import java.util.ArrayList;

class Book {

int bookId ;

String bookName ;

String authorName ;

// Parameterized constructor

public Book(int bookId, String bookName, String authorName) {

this.bookId = bookId;

this.bookName = bookName;

this.authorName = authorName;

}

// 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: " + authorName);

System.out.println();

}

}

public class BookCollection {

public static void main (String[] args) {

// Create an ArrayList to store Book objects

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

// Add Book objects to the ArrayList

books.add(new Book(101, "Life Of Pi", "Yann Martel"));

books.add(new Book(102, "1984", "George Orwell"));

books.add(new Book(103, "The Post Office ", "Rabindra Nath Tagore"));

// Display all book details using advanced for loop

for (Book book : books) {

book.displayBookDetails();

}

}

}

Output :

Book ID: 101

Book Name: Life Of Pi

Author Name: Yann Martel

Book ID: 102

Book Name: 1984

Author Name: George Orwell

Book ID: 103

Book Name: The Post Office

Author Name: Rabindra Nath Tagore

Problem-2

Write a program to reverse a given List of strings.

Code:

import java.util.ArrayList;

import java.util.Collections;

public class ReverseStringList {

public static void main(String[] args) {

// Create an ArrayList of strings

ArrayList<String> strings = new ArrayList<>();

strings.add("Apple");

strings.add("Banana");

strings.add("Cherry");

strings.add("Date");

System.out.println("Given string is : " + strings);

// Reverse the List

Collections.reverse(strings);

// Display reversed list

for (String str : strings) {

System.out.println(str + “ “);

}

}

}

Output:

Given string is : [Apple, Banana, Cherry, Date]

Date Cherry Banana Apple