Functionality of main()

```
int main() {
preloadBooks();  // Load 20 books at program start
cout << "ST.MARY UNIVERSITY" << endl << "COMPUTER SCIENCE DEPARTMENT";
int choice;
do {
cout << "\nLibrary Management System\n";
cout << "1. View Books\n";
cout << "2. Add Book\n";
cout << "3. Issue Book\n";
cout << "4. Exit\n";
cout << "Enter your choice: ";
cin >> choice;
switch (choice) {
case 1:
viewBooks();
break;
case 2:
addBook();
break;
case 3: {
int index;
cout << "Enter book index to issue: ";
cin >> index;
issueBook(index);
break;
}
```

```
case 4:
cout << "Exiting...\n";
break;
default:
cout << "Invalid choice.\n";
}
} while (choice != 4);
return 0;
}
```

Preloads Sample Data: It starts by calling preloadBooks() to add some example books automatically.

2. Displays Menu to User: Shows options like:

Add book

View books

Issue book

Exit

3. Handles User Input: Uses a do-while loop to keep showing the menu until the user chooses to exit.

Inside the loop, it uses switch-case to process the user's choice.

4. Executes Selected Action:Based on input:

1 -> calls addBook()

2 -> calls viewBooks()

3 -> calls issueBook()

4 -> exits the loop and ends the program

Key Features

Menu-Driven: Easy for users to interact with using a number-based system.

Looping: Keeps running until the user chooses to exit.

Switch-Case Logic: Efficient way to select between options.

Basic Input Validation: Only checks if the input is between 1-4.

Testing Support: Uses preload data so you can test without manually adding books every time.