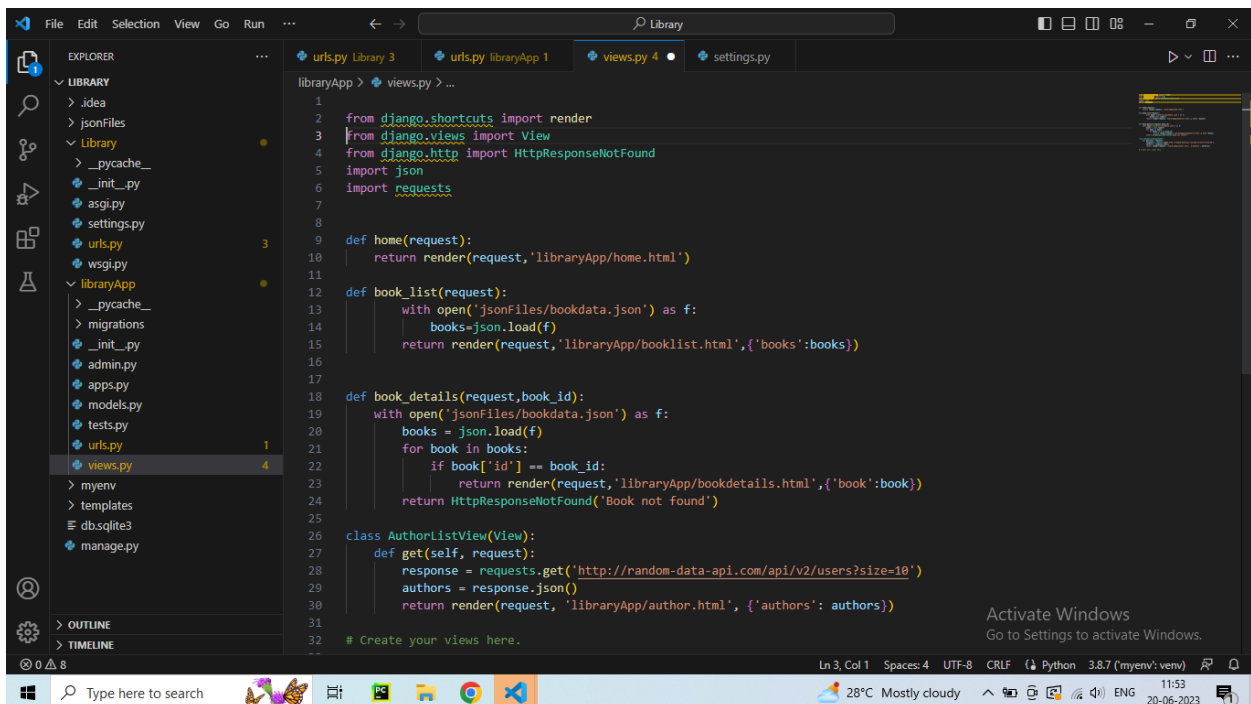


Assignment

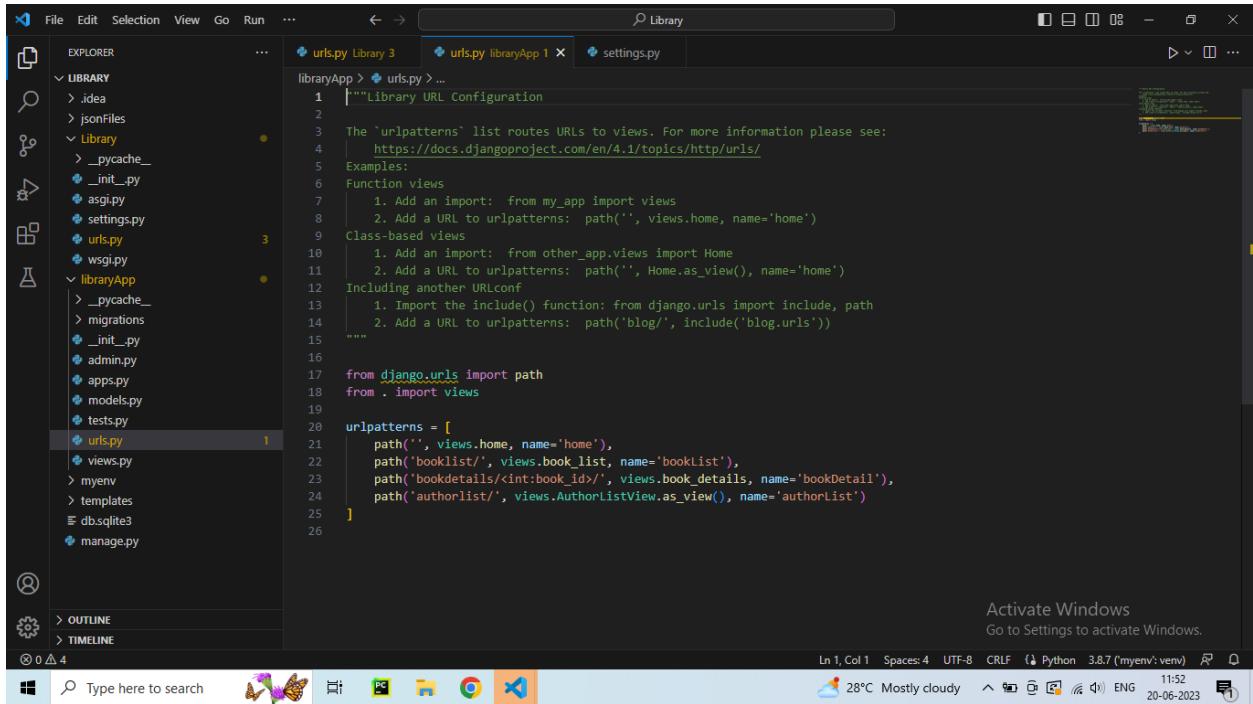
- Create a Library web app
- It should contain the following pages:
 - Home: Display a Welcome message using Templates
 - Book List: Use function based views to list books using Templates
 - Book data to be read from "book_list.json"
 - Book Detail: Use function based views to display detail of single book. Take id from URL parameter and display appropriate book data from "book_list.json"
 - Author List: Use class based views to list Authors
 - Author data to be read from the following API: <https://random-data-api.com/api/v2/users?size=10>.

views.py

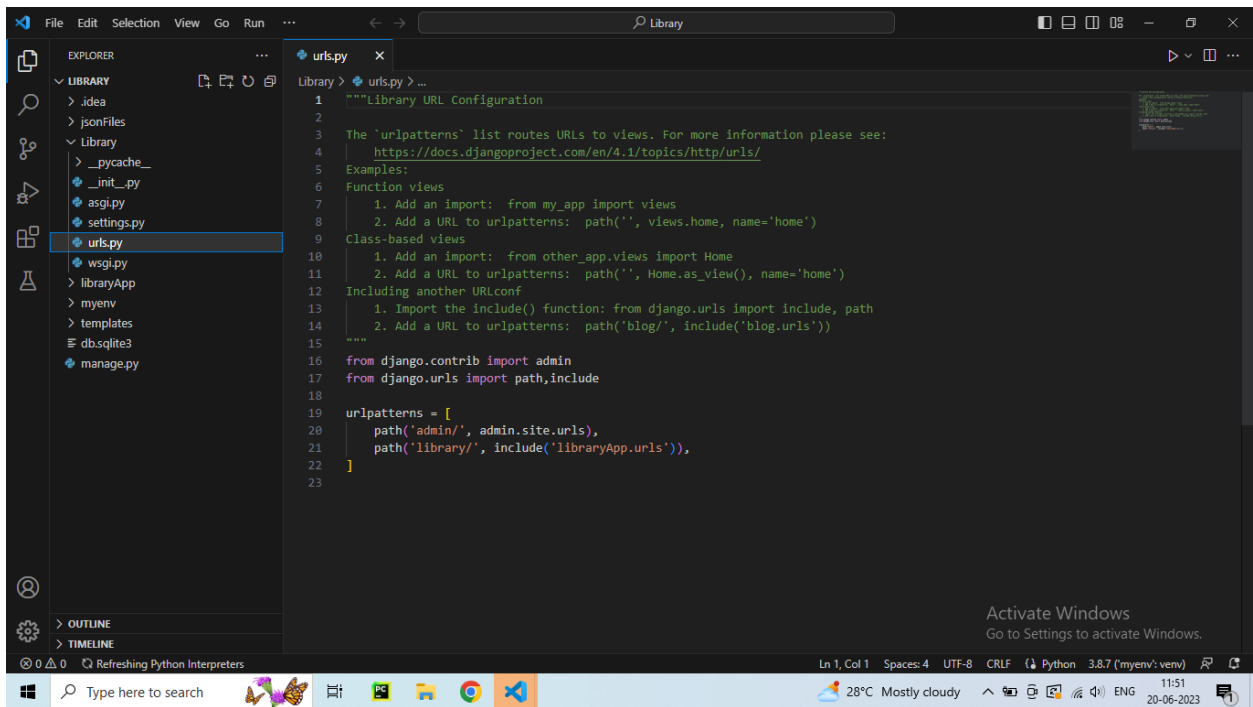


```
libraryApp > views.py > ...
1
2 from django.shortcuts import render
3 from django.views import View
4 from django.http import HttpResponseRedirect
5 import json
6 import requests
7
8
9 def home(request):
10     return render(request, 'libraryApp/home.html')
11
12 def book_list(request):
13     with open('jsonFiles/bookdata.json') as f:
14         books=json.load(f)
15     return render(request, 'libraryApp/booklist.html', {'books':books})
16
17
18 def book_details(request,book_id):
19     with open('jsonFiles/bookdata.json') as f:
20         books = json.load(f)
21         for book in books:
22             if book['id'] == book_id:
23                 return render(request, 'libraryApp/bookdetails.html', {'book':book})
24         return HttpResponseRedirect('Book not found')
25
26 class AuthorListView(View):
27     def get(self, request):
28         response = requests.get('http://random-data-api.com/api/v2/users?size=10')
29         authors = response.json()
30         return render(request, 'libraryApp/author.html', {'authors': authors})
31
32 # Create your views here.
```

URL(App)



URL(Project)



Settings.py

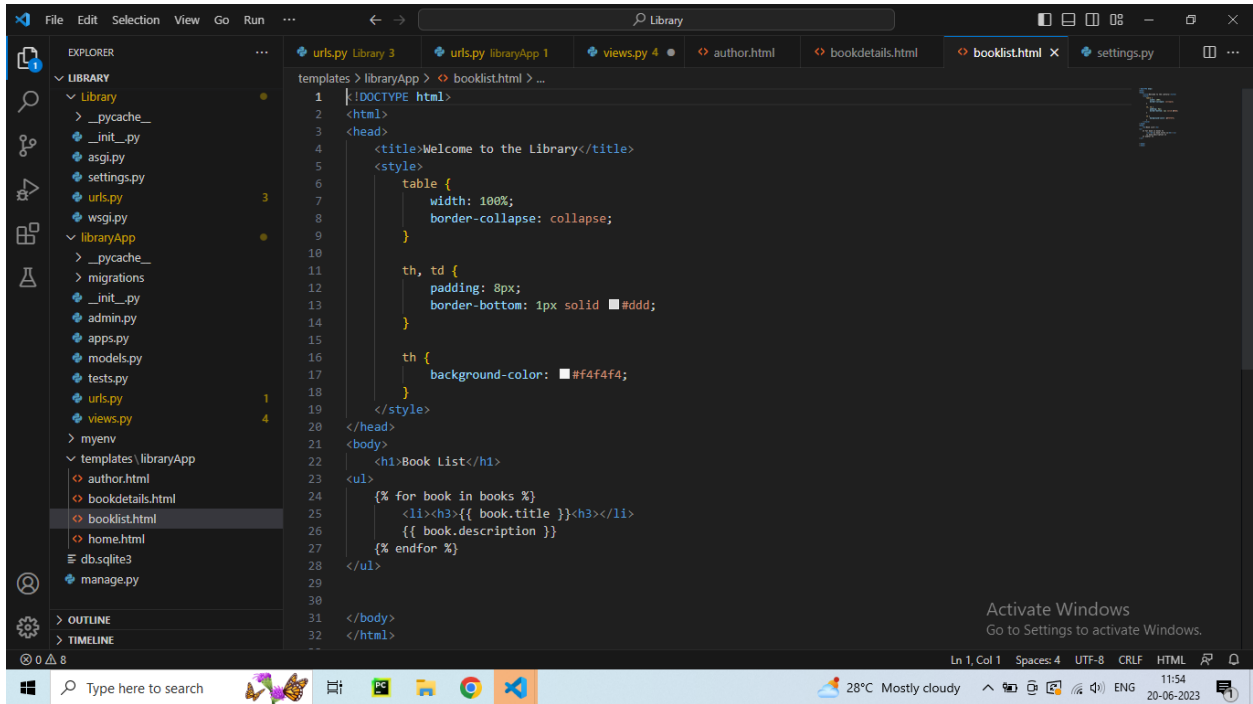
```
32
33
34 INSTALLED_APPS = [
35     'django.contrib.admin',
36     'django.contrib.auth',
37     'django.contrib.contenttypes',
38     'django.contrib.sessions',
39     'django.contrib.messages',
40     'django.contrib.staticfiles',
41     'libraryApp'
42 ]
43
44 MIDDLEWARE = [
45     'django.middleware.security.SecurityMiddleware',
46     'django.contrib.sessions.middleware.SessionMiddleware',
47     'django.middleware.common.CommonMiddleware',
48     'django.middleware.csrf.CsrfViewMiddleware',
49     'django.contrib.auth.middleware.AuthenticationMiddleware',
50     'django.contrib.messages.middleware.MessageMiddleware',
51     'django.middleware.clickjacking.XFrameOptionsMiddleware',
52 ]
53
54 ROOT_URLCONF = 'Library.urls'
55
56 TEMPLATES = [
57     {
58         'BACKEND': 'django.template.backends.django.DjangoTemplates',
59         'DIRS': [str(BASE_DIR.joinpath('templates'))],
60         'APP_DIRS': True,
61         'OPTIONS': {
62             'context_processors': [
63                 'django.template.context_processors.debug',
64                 'django.template.context_processors.request',
65                 'django.contrib.auth.context_processors.auth',
66                 'django.contrib.messages.context_processors.messages',
67             ],
68         },
69     },
70 ]
```

Templates

Home.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4     <title>Library-Home Page</title>
5     <style>
6         body {
7             text-align: center;
8         }
9
10        h1 {
11            font-size: 60px;
12            color: #FF5733;
13        }
14        h2 {
15            font-size: 40px;
16            color: #ccc;
17        }
18    </style>
19 </head>
20 <body>
21     <h1>WELCOME TO THE LIBRARY</h1>
22     <h2><b><i>"Reading is essential for those who seek to rise above the ordinary." - Jim Rohn</i><b></h2>
23 </body>
24 </html>
```

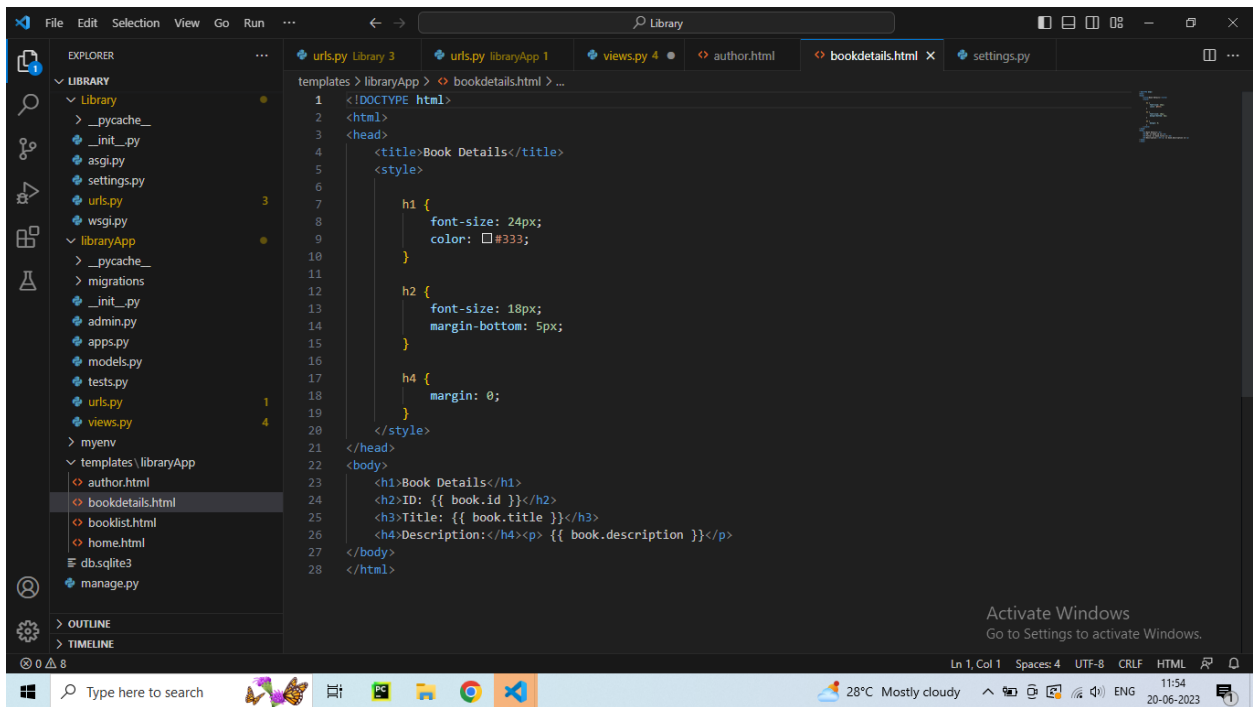
Booklist.html



The screenshot shows the Visual Studio Code editor with the Explorer sidebar on the left. The Explorer sidebar shows a project structure with folders like 'Library' and 'libraryApp', and files like 'urls.py', 'views.py', 'author.html', 'bookdetails.html', 'booklist.html', and 'settings.py'. The 'booklist.html' file is selected and its content is displayed in the main editor area. The code is an HTML template for a book list, featuring a table structure with a header and a body containing a loop for book entries. The status bar at the bottom shows 'Ln 1, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', 'HTML', and a temperature indicator.

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Welcome to the Library</title>
5   <style>
6     table {
7       width: 100%;
8       border-collapse: collapse;
9     }
10
11     th, td {
12       padding: 8px;
13       border-bottom: 1px solid #ddd;
14     }
15
16     th {
17       background-color: #f4f4f4;
18     }
19   </style>
20 </head>
21 <body>
22   <h1>Book List</h1>
23   <ul>
24     {% for book in books %}
25     <li><h3>{{ book.title }}</h3></li>
26     {{ book.description }}
27     {% endfor %}
28   </ul>
29
30
31 </body>
32 </html>
```

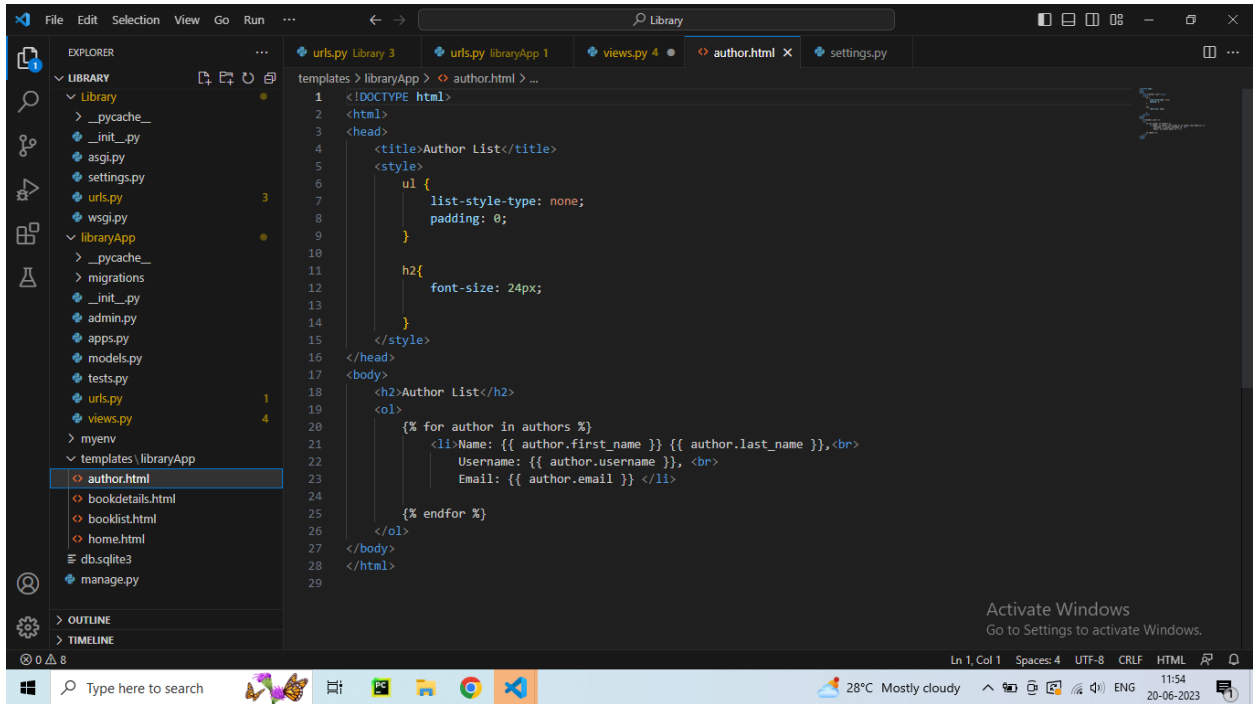
Bookdetails.html



The screenshot shows the Visual Studio Code editor with the Explorer sidebar on the left. The Explorer sidebar shows a project structure with folders like 'Library' and 'libraryApp', and files like 'urls.py', 'views.py', 'author.html', 'bookdetails.html', 'booklist.html', and 'settings.py'. The 'bookdetails.html' file is selected and its content is displayed in the main editor area. The code is an HTML template for book details, featuring a header with the book ID, title, and description, and a body with the book details. The status bar at the bottom shows 'Ln 1, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', 'HTML', and a temperature indicator.

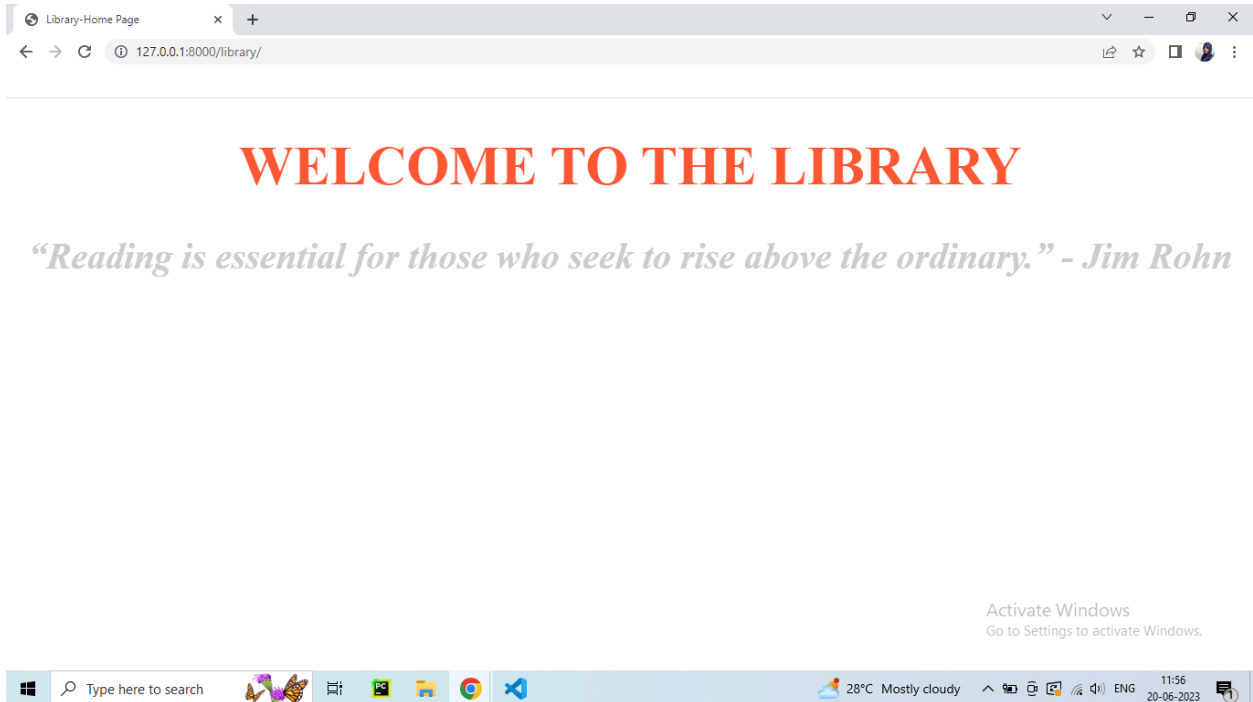
```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Book Details</title>
5   <style>
6     h1 {
7       font-size: 24px;
8       color: #333;
9     }
10
11     h2 {
12       font-size: 18px;
13       margin-bottom: 5px;
14     }
15
16     h4 {
17       margin: 0;
18     }
19   </style>
20 </head>
21 <body>
22   <h1>Book Details</h1>
23   <h2>ID: {{ book.id }}</h2>
24   <h3>Title: {{ book.title }}</h3>
25   <h4>Description:</h4><p> {{ book.description }}</p>
26
27 </body>
28 </html>
```

Authorlist.html

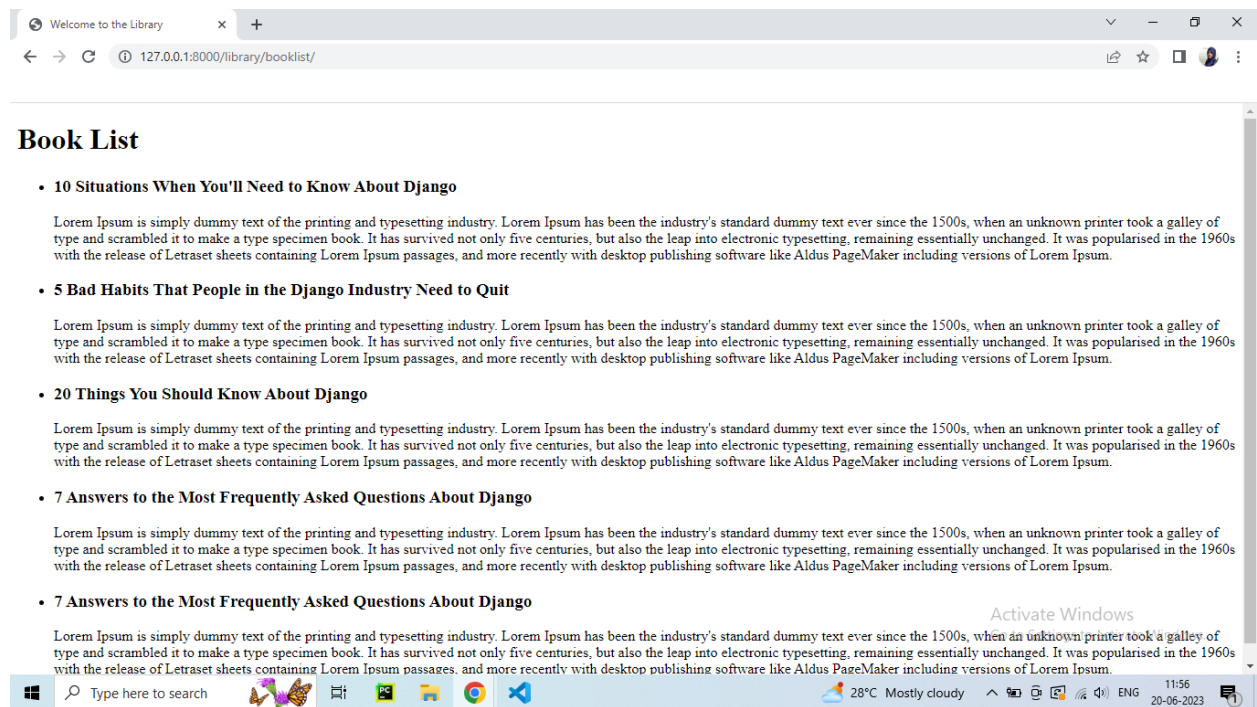


Library Pages

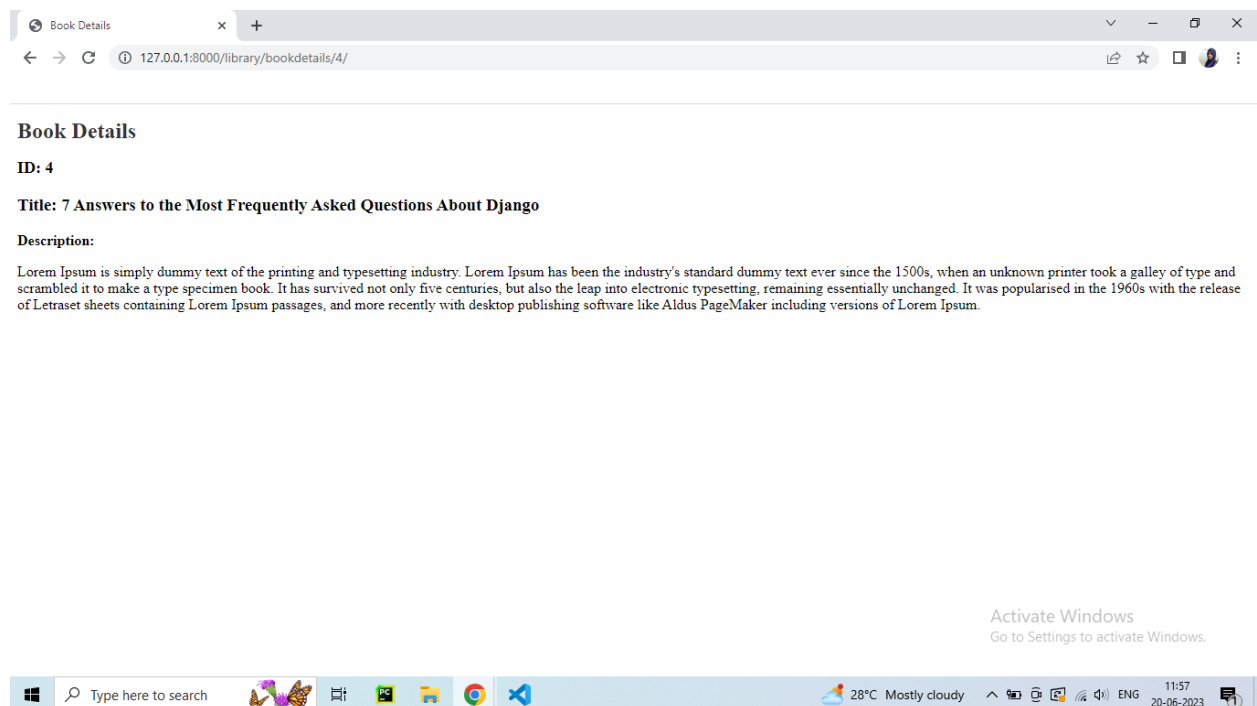
Home



BookList



BookDetails



AuthorList

