

Lab 10



Django Forms (Part 1)

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Subject: CS 471

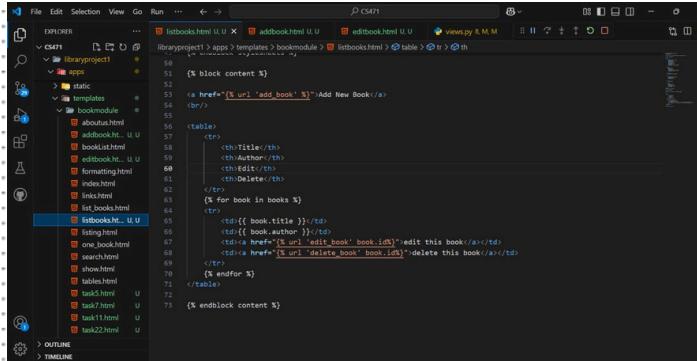
Section number: 3526

Doctor Name: Bshayer Alkhalifa

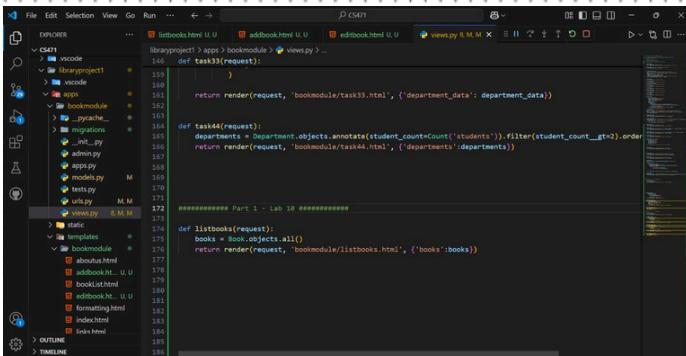
Part 1

Task 1

Code

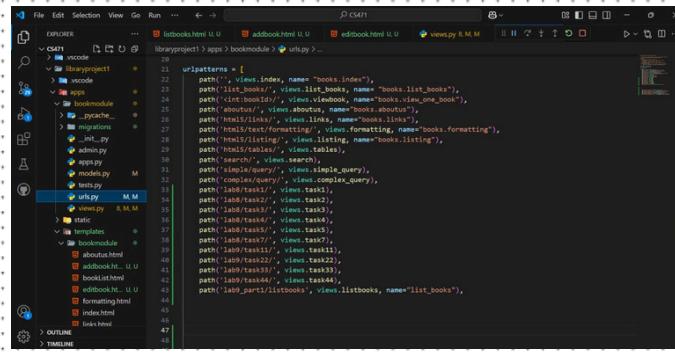


```
<table>
    <thead>
        <tr>
            <th>Title</th>
            <th>Author</th>
            <th>Edit</th>
            <th>Delete</th>
        </tr>
    </thead>
    <tbody>
        {% for book in books %}
        <tr>
            <td>{{ book.title }}</td>
            <td>{{ book.author }}</td>
            <td><a href="{% url 'edit_book' book.id %}">edit this book</a></td>
            <td><a href="{% url 'delete_book' book.id %}">delete this book</a></td>
        </tr>
        {% endfor %}
    </tbody>
</table>
```



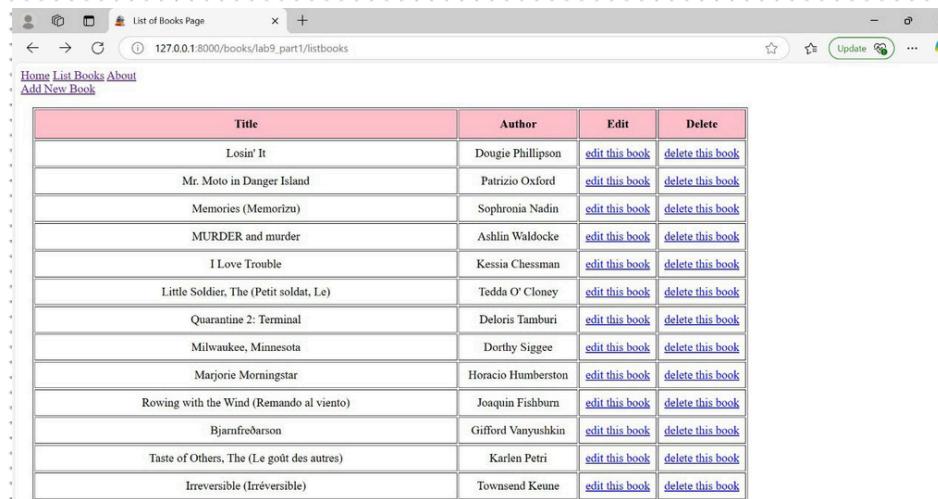
```
def task33(request):
    return render(request, 'bookmodule/task33.html', {'department_data': department_data})

def task44(request):
    departments = Department.objects.annotate(student_count=Count('students')).filter(student_count__gt=2).order_by('name')
    return render(request, 'bookmodule/task44.html', {'departments': departments})
```



```
urlpatterns = [
    path('list_books/', views.list_books, name='books.list_books'),
    path('list_bookid//', views.viewbook, name='books.view_one_book'),
    path('aboutus', views.aboutus, name='books.aboutus'),
    path('formatting', views.formatting, name='books.formatting'),
    path('listing', views.listing, name='books.listing'),
    path('simple/query', views.simple_query),
    path('complex/query', views.complex_query),
    path('lab/task1', views.task1),
    path('lab/task2', views.task2),
    path('lab/task3', views.task3),
    path('lab/task4', views.task4),
    path('lab/task5', views.task5),
    path('lab/task6', views.task6),
    path('lab/task7', views.task7),
    path('lab/task11', views.task11),
    path('lab/task12', views.task12),
    path('lab/task13', views.task13),
    path('lab/part1/listbooks', views.listbooks, name='list_books'),
]
```

Task 1 Output



A screenshot of a web browser window titled "List of Books Page". The address bar shows the URL "127.0.0.1:8000/books/lab9_part1/listbooks". Below the address bar, there are links for "Home", "List Books", "About", and "Add New Book". The main content is a table with four columns: "Title", "Author", "Edit", and "Delete". Each row contains a book title and its author, followed by two links: "edit this book" and "delete this book".

Title	Author	Edit	Delete
Losin' It	Dougie Phillipson	edit this book	delete this book
Mr. Moto in Danger Island	Patrizio Oxford	edit this book	delete this book
Memories (Memorizu)	Sophronia Nadin	edit this book	delete this book
MURDER and murder	Ashlin Waldocke	edit this book	delete this book
I Love Trouble	Kessia Chessman	edit this book	delete this book
Little Soldier, The (Petit soldat, Le)	Tedda O' Cloney	edit this book	delete this book
Quarantine 2: Terminal	Deloris Tamburi	edit this book	delete this book
Milwaukee, Minnesota	Dorthy Siggee	edit this book	delete this book
Marjorie Morningstar	Horacio Humberston	edit this book	delete this book
Rowing with the Wind (Remando al viento)	Joaquin Fishburn	edit this book	delete this book
Bjarnfrobarson	Gifford Vanyushkin	edit this book	delete this book
Taste of Others, The (Le goût des autres)	Karenl Petri	edit this book	delete this book
Irreversible (Irréversible)	Townsend Keune	edit this book	delete this book

Task 2

Code

The image shows three separate Microsoft Edge browser windows, each displaying a different file from a Python project structure. The project is named 'libraryproject1' and contains several packages and files.

- Top Window:** Shows the content of `bookmodule/addbook.html`. The page includes a form with fields for title and author, and a submit button labeled "Add".
- Middle Window:** Shows the content of `views.py`. It defines two functions:
 - `listbooks(request)`: Returns a render of `bookmodule/listbooks.html` with a context variable `'books': books`.
 - `addbook(request)`: Checks if the request method is POST. If so, it creates a new book object with title and author from the POST data, then redirects to the listbooks view. Otherwise, it renders `bookmodule/addbook.html`.
- Bottom Window:** Shows the content of `urls.py`. It defines URL patterns for various views:
 - `urlpatterns = [path('', views.index, name='books_index'), path('list_books', views.list_books, name='books.list_books'), path('one_book', views.one_book, name='books.view_one_book'), path('aboutus', views.aboutus, name='books.aboutus'), path('links', views.links, name='books.links'), path('formatting', views.formatting, name='books.formatting'), path('listing', views.listing, name='books.listing'), path('tables', views.tables), path('search', views.search), path('complex_query', views.complex_query), path('task1', views.task1), path('task2', views.task2), path('task3', views.task3), path('task4', views.task4), path('task5', views.task5), path('task6', views.task6), path('task7', views.task7), path('task8', views.task8), path('task9', views.task9), path('task10', views.task10), path('task11', views.task11), path('task12', views.task12), path('task13', views.task13), path('task14', views.task14), path('task15', views.task15), path('task16', views.task16), path('task17', views.task17), path('task18', views.task18), path('task19', views.task19), path('task20', views.task20), path('task21', views.task21), path('task22', views.task22), path('task23', views.task23), path('task24', views.task24), path('task25', views.task25), path('task26', views.task26), path('task27', views.task27), path('task28', views.task28), path('task29', views.task29), path('task30', views.task30), path('task31', views.task31), path('task32', views.task32), path('task33', views.task33), path('task34', views.task34), path('task35', views.task35), path('task36', views.task36), path('task37', views.task37), path('task38', views.task38), path('task39', views.task39), path('task40', views.task40), path('task41', views.task41), path('task42', views.task42), path('task43', views.task43), path('task44', views.task44), path('task45', views.task45), path('task46', views.task46), path('task47', views.task47), path('task48', views.task48), path('task49', views.task49)]`

Task 2 Output

List of Books Page

127.0.0.1:8000/books/lab9_part1/listbooks

NAME	AUTHOR	EDIT THIS BOOK	DELETE THIS BOOK
Curious George	Markus Beatty	edit this book	delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book	delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tumayan	edit this book	delete this book
Parent Trap, The	Hav Pearne	edit this book	delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book	delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book	delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book	delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Okami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book	delete this book
Bio Zombie (Sun faa sau si)	Haslett Gremane	edit this book	delete this book
Larks on a String (Skrivanci na nit)	Paola Strowger	edit this book	delete this book
Space Jam	Ginger Schutter	edit this book	delete this book
Juvenile Court	Tripp Fairhead	edit this book	delete this book
Wishful Thinking	Gretta Seymark	edit this book	delete this book
Joud's Book	Joud	edit this book	delete this book

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Add Book Page

127.0.0.1:8000/books/lab9_part1/addbook

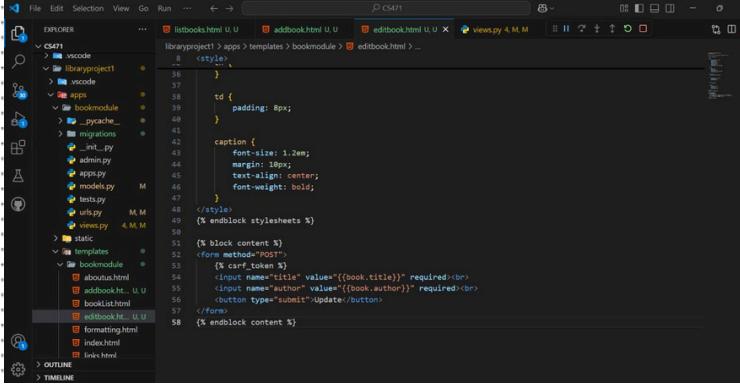
Home List Books About

Joud's Book
Joud

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Task 3

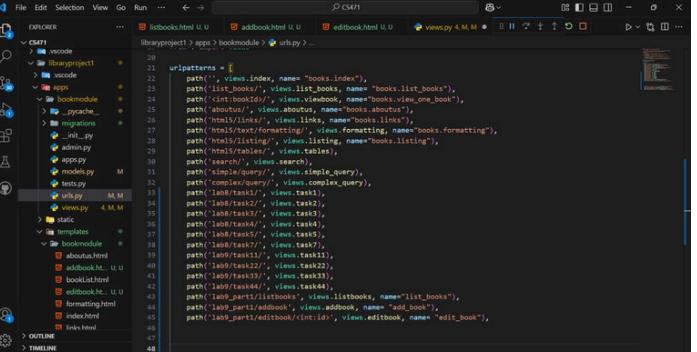
Code



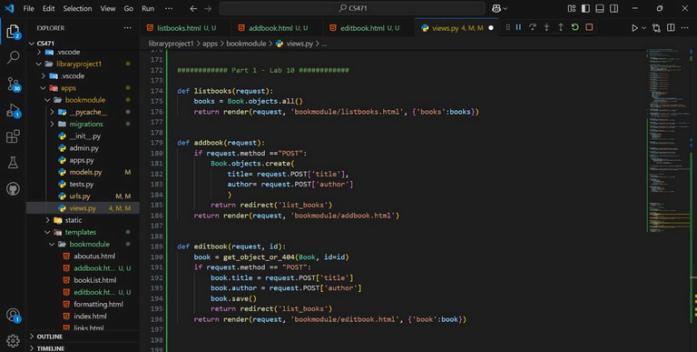
```
<style>
    td {
        padding: 8px;
    }

    caption {
        font-size: 1.2em;
        margin: 10px;
        text-align: center;
        font-weight: bold;
    }
</style>

{% block content %}
<form method="POST">
    {% csrf_token %}
    <input name="title" value="{{book.title}}><br>
    <input name="author" value="{{book.author}}><br>
    <button type="submit">Update</button>
</form>
{% endblock content %}
```



```
urlpatterns = [
    path('', views.index, name='books.index'),
    path('list_books/', views.list_books, name='books.list_books'),
    path('<int:bookid>/view_one_book', views.view_one_book),
    path('aboutus', views.aboutus, name='books.aboutus'),
    path('html5links/', views.links, name='books.links'),
    path('html5/text/formatting/', views.formatting, name='books.formatting'),
    path('html5/listing/', views.listing, name='books.listing'),
    path('complex_query/', views.complex_query),
    path('simple_query/', views.simple_query),
    path('complex/every/', views.complex_query),
    path('complex/any/', views.complex_query),
    path('complex/none/', views.complex_query),
    path('lamb/task1/', views.task1),
    path('lamb/task2/', views.task2),
    path('lamb/task3/', views.task3),
    path('lamb/task4/', views.task4),
    path('lamb/task5/', views.task5),
    path('lamb/task6/', views.task6),
    path('lamb/task7/', views.task7),
    path('lamb/task8/', views.task8),
    path('lamb/task9/', views.task9),
    path('lamb/task10/', views.task10),
    path('lamb/task11/', views.task11),
    path('lamb/task12/', views.task12),
    path('lamb/task13/', views.task13),
    path('lamb/task14/', views.task14),
    path('lamb/task15/', views.task15),
    path('lamb/part1/listbooks', views.listbooks, name='list_books'),
    path('lamb/part1/addbook', views.addbook, name='add_book'),
    path('lamb/part1/editbook/<int:id>', views.editbook, name='edit_book'),
]
```



```
def listbooks(request):
    books = Book.objects.all()
    return render(request, 'bookmodule/listbooks.html', {'books':books})

def addbook(request):
    if request.method == "POST":
        book = Book()
        book.title = request.POST['title']
        book.author = request.POST['author']
    else:
        return redirect('list_books')
    book.save()
    return render(request, 'bookmodule/addbook.html')

def editbook(request, id):
    book = get_object_or_404(Book, id=id)
    if request.method == "POST":
        book.title = request.POST['title']
        book.author = request.POST['author']
        book.save()
    else:
        return redirect('list_books')
    return render(request, 'bookmodule/editbook.html', {'book':book})
```

Task 3 Output

The image displays two screenshots of a web application interface. The left screenshot shows a 'List Books Page' with a table of books and their details. The right screenshot shows an 'Edit Book Page' for a specific book entry.

List Books Page (Left Screenshot):

Book Name	Author	Action
Curious George	Markus Beatty	edit this book delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tumayan	edit this book delete this book
Parent Trap, The	Havv Pearne	edit this book delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Ôkami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book delete this book
Bio Zombie (Sua faa sui si)	Haslett Gremane	edit this book delete this book
Larks on a String (Skrivanci na niti)	Paola Strowger	edit this book delete this book
Space Jam	Ginger Schutter	edit this book delete this book
Juvenile Court	Tripp Fairhead	edit this book delete this book
Wishful Thinking	Gretta Seymark	edit this book delete this book
Joud's Book	Joud Alblashed	edit this book delete this book

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Edit Book Page (Right Screenshot):

Home List Books About
Joud's Book
Joud Alblashed
Update

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Task 4 Code

The image shows two side-by-side instances of the Visual Studio Code (VS Code) code editor. Both instances have the title bar "File Edit Selection View Go Run ...". The left instance shows the file "views.py" with the following code:

```
1 urlpatterns = [
2     path('list_books/', views.list_books, name="books.list_books"),
3     path('list_books//', views.list_books, name="books.list_one_book"),
4     path('aboutus/', views.aboutus, name="books.aboutus"),
5     path('html5/links/', views.links, name="books.links"),
6     path('html5/text/formatting/', views.formatting, name="books.formatting"),
7     path('html5/listing/', views.listing, name="books.listing"),
8     path('html5/tables/', views.tables),
9     path('search/', views.search),
10    path('simple_query/', views.simple_query),
11    path('simple_query//', views.simple_query),
12    path('lab8/task1/', views.task1),
13    path('lab8/task2/', views.task2),
14    path('lab8/task3/', views.task3),
15    path('lab8/task4/', views.task4),
16    path('lab8/task5/', views.task5),
17    path('lab8/task6/', views.task6),
18    path('lab8/task11/', views.task11),
19    path('lab8/task22/', views.task22),
20    path('lab9/task33/', views.task33),
21    path('lab9/task44/', views.task44),
22    path('lab9/part1/listbooks', views.listbooks, name="list_books"),
23    path('lab9/part1/addbook', views.addbook, name="add_book"),
24    path('lab9/part1/editbook/', views.editbook, name="edit_book"),
25    path('lab9/part1/deletebook/', views.deletebook, name="delete_book"),
26]
```

The right instance shows the file "views.py" with the following code:

```
174 def listbooks(request):
175     return render(request, 'bookmodule/listbooks.html', {'books':books})
176
177 def addbook(request):
178     if request.method == "POST":
179         Book.objects.create(
180             title=request.POST['title'],
181             author=request.POST['author']
182         )
183     return redirect('list_books')
184
185 def editbook(request, id):
186     book = get_object_or_404(Book, id=id)
187     if request.method == "POST":
188         book.title = request.POST['title']
189         book.author = request.POST['author']
190         book.save()
191     return redirect('list_books')
192
193 def deletebook(request, id):
194     book = get_object_or_404(Book, id=id)
195     book.delete()
196
197     return redirect('list_books')
```

Task 4 Output

List of Books Page		
127.0.0.1:8000/books/lab9_part1/listbooks		
<i>NOTE: JAMES NEEDS FINANCIALISTS Languages</i>		
Male Domination	Maurice Burner	edit this book delete this book
Curious George	Markus Beatty	edit this book delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tunayan	edit this book delete this book
Parent Trap, The	Harv Pearce	edit this book delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Ōkami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book delete this book
Bio Zombie (Sun faa sau si)	Haslett Gremane	edit this book delete this book
Larks on a String (Skrivánci na nití)	Paola Strowger	edit this book delete this book
Space Jam	Ginger Schutter	edit this book delete this book
Juvenile Court	Tripp Fairhead	edit this book delete this book
Wishful Thinking	Greta Seymour	edit this book delete this book

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List of Books Page		
127.0.0.1:8000/books/lab9_part1/listbooks		
<i>NOTE: JAMES NEEDS FINANCIALISTS Languages</i>		
Curious George	Markus Beatty	edit this book delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tunayan	edit this book delete this book
Parent Trap, The	Harv Pearce	edit this book delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Ōkami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book delete this book
Bio Zombie (Sun faa sau si)	Haslett Gremane	edit this book delete this book
Larks on a String (Skrivánci na nití)	Paola Strowger	edit this book delete this book
Space Jam	Ginger Schutter	edit this book delete this book
Juvenile Court	Tripp Fairhead	edit this book delete this book
Wishful Thinking	Greta Seymour	edit this book delete this book
Joud's Book	Joud Alblaihd	edit this book delete this book

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127.0.0.1:8000/books/lab9_part1/listbooks/101

Part 2

Task 1

Code



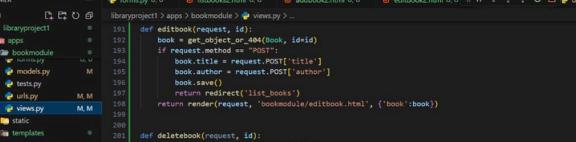
The screenshot shows the PyCharm IDE interface with the following details:

- Project Structure:** The left sidebar displays the project structure under "libraryproject". It includes a "static" folder containing "css" and "js" subfolders, and a "templates" folder containing "bookmodule" with files like "aboutus.html", "addbook2.html", "editbook2.html", "listbook2.html", and "linkbook2.html".
- Code Editor:** The main window shows a file named "listbooks2.html" with the following content:

```
libraryproject > apps > templates > bookmodule > listbooks2.html > ...
  1 <style>
  2   body {
  3     font-family: sans-serif;
  4   }
  5   </style>
  6   <div>
  7     <h1>List of Books</h1>
  8     <table>
  9       <thead>
 10         <tr>
 11           <th>Title</th>
 12           <th>Author</th>
 13           <th>Edit</th>
 14           <th>Delete</th>
 15         </tr>
 16       </thead>
 17       <tbody>
 18         <% for book in books %>
 19           <tr>
 20             <td><{{ book.title }}></td>
 21             <td><{{ book.author }}></td>
 22             <td><a href="{{ url }}>edit this book</a></td>
 23             <td><a href="{{ url }}>delete this book</a></td>
 24           </tr>
 25         <% endfor %>
 26       </tbody>
 27     </table>
 28   </div>
 29   <script>
 30     $(document).ready(function() {
 31       $("table").DataTable();
 32     });
 33   </script>
 34 </body>
 35 </html>
```

```
forms.py U x  libbook2html U U  addbook2.html U U  editbook2.html U U  urls.py D C:\441

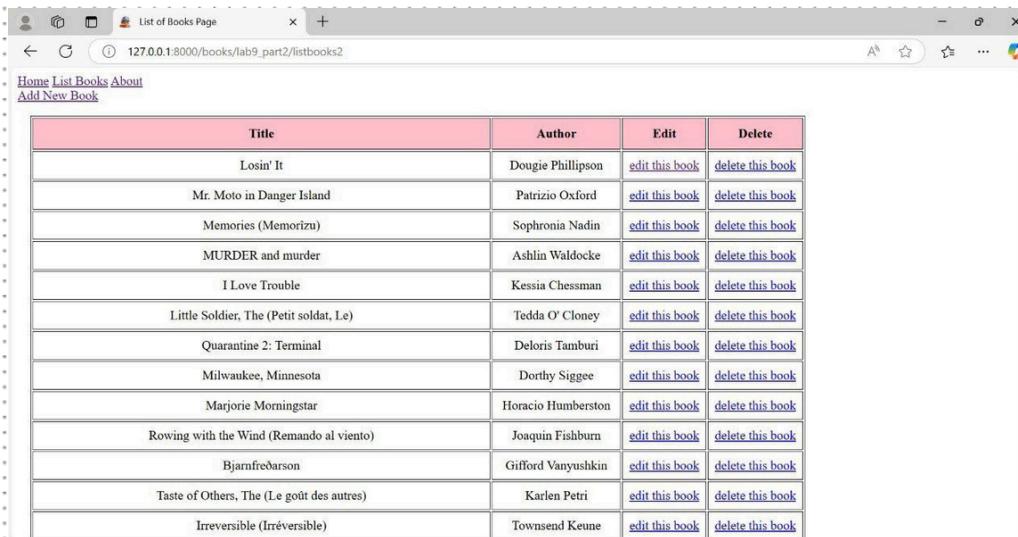
libraryproject1\apps>bookmodule>forms.py >BookForm > Meta
1   from django import forms
2   from .models import Book
3
4
5   class BookForm(forms.ModelForm):
6       class Meta:
7           model = Book
8           fields = ['title', 'author']
```



The screenshot shows a Python development environment with the following details:

- File Explorer:** Shows a project structure for "libraryproject" with files like forms.py, urls.py, models.py, tests.py, and various HTML files (aboutus.html, addbook.html, editbook.html, etc.).
- Code Editor:** The main editor window displays the content of views.py. The code defines two main functions: `editbook` and `deletebook`.
 - `editbook` handles a POST request to update a book's title and author, then redirects to the list of books.
 - `deletebook` handles a GET request to delete a book by ID, then redirects to the list of books.
- Terminal:** The bottom right corner shows a terminal window with the command `cd C:\11`.

Task 1 Output

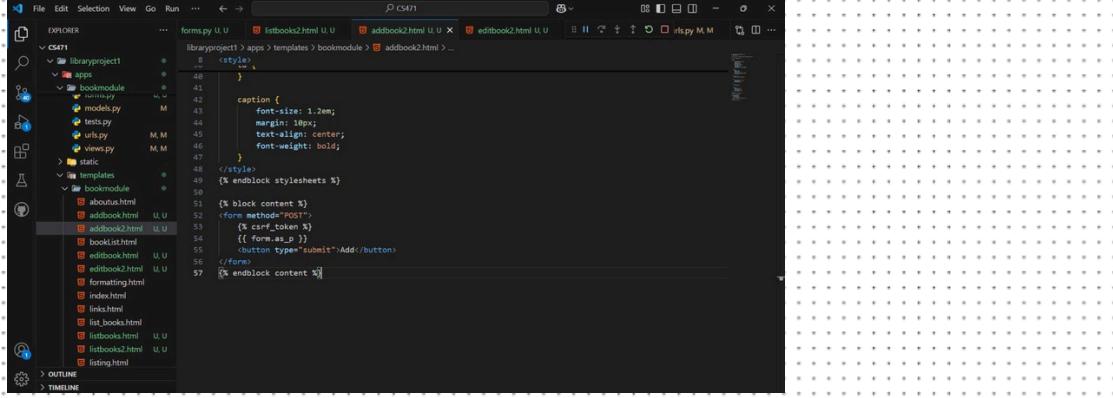


A screenshot of a web browser window titled "List of Books Page". The URL in the address bar is "127.0.0.1:8000/books/lab9_part2/listbooks2". The page contains a table with 15 rows of book information. Each row has four columns: Title, Author, Edit, and Delete. The "Edit" and "Delete" columns contain blue hyperlinks. The table has a pink header row.

Title	Author	Edit	Delete
Losin' It	Dougie Phillipson	edit this book	delete this book
Mr. Moto in Danger Island	Patrizio Oxford	edit this book	delete this book
Memories (Memorizu)	Sophronia Nadin	edit this book	delete this book
MURDER and murder	Ashlin Waldocke	edit this book	delete this book
I Love Trouble	Kessia Chessman	edit this book	delete this book
Little Soldier, The (Petit soldat, Le)	Tedda O' Cloney	edit this book	delete this book
Quarantine 2: Terminal	Deloris Tamburi	edit this book	delete this book
Milwaukee, Minnesota	Dorthy Siggee	edit this book	delete this book
Marjorie Morningstar	Horacio Humberston	edit this book	delete this book
Rowing with the Wind (Remando al viento)	Joaquin Fishburn	edit this book	delete this book
Bjarnfredarson	Gifford Vanyushkin	edit this book	delete this book
Taste of Others, The (Le goût des autres)	Karlen Petri	edit this book	delete this book
Irreversible (Irréversible)	Townsend Keune	edit this book	delete this book

Task 2

Code



The screenshot shows a code editor with three tabs open:

- `addbook2.html`: Contains the following CSS code:

```
<style>
    caption {
        font-size: 1.2em;
        margin: 10px;
        text-align: center;
        font-weight: bold;
    }
</style>
<!-- endblock stylesheets -->
```

- `editbook2.html`: Contains the following HTML and form code:

```
<form method="POST">
    {% csrf_token %}
    {{ form.as_p }}
    <input type="submit" value="Add"/>
</form>
<!-- endblock content -->
```

- `addbook2.html`: Contains the following Python view code:

```
def addbook2(request):
    book = get_object_or_404(Book, id=id)
    book.delete()
    return redirect('list_books')

def listbooks2(request):
    books = Book.objects.all()
    return render(request, 'bookmodule/listbooks2.html', {'books':books})

def addbook2(request):
    if request.method == "POST":
        form = BookForm(request.POST)
        if form.is_valid():
            form.save()
            return redirect('list_books')
        else:
            form = BookForm()
    return render(request, 'bookmodule/addbook2.html', {'form':form})
```

Task 2 Output

List of Books Page

NAME	AUTHOR	edit this book	delete this book
Curious George	Markus Beatty	edit this book	delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book	delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tunayan	edit this book	delete this book
Parent Trap, The	Hav Pearson	edit this book	delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book	delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book	delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book	delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Ōkami: Oya no kokoro ko no kokomo)	Betty Ruddlesden	edit this book	delete this book
Bio Zombie (Sun fa sau ii)	Haslett Gremane	edit this book	delete this book
Larks on a String (Skrivánci na niti)	Paola Strowger	edit this book	delete this book
Space Jam	Ginger Schutter	edit this book	delete this book
Juvenile Court	Tripp Fairhead	edit this book	delete this book
Wishful Thinking	Gretta Seymark	edit this book	delete this book
Joud's Book	Joud	edit this book	delete this book

This page was created by joud

Add Book Page

Home List Books About

Title:

Author:

This page was created by joud

Task 3

Code

The image displays three separate code editor windows, likely from the VS Code IDE, showing different parts of a Django application named 'libraryproject'.

- Top Editor:** Shows a CSS file (`editbook2.html`) with the following content:

```
td {
    padding: 8px;
}
caption {
    border: 1px solid #ccc;
    margin: 10px;
    text-align: center;
    font-weight: bold;
}
/* block content $ */
/* form method="POST" */
/* $ forf token $ */
{{ form.as_p }}


```

- Middle Editor:** Shows a Python view file (`views.py`) with the following code:

```
def listbooks2(request):
    books = Book.objects.all()
    return render(request, 'bookmodule/listbooks2.html', {'books':books})

def addbook3(request):
    if request.method == "POST":
        form = BookForm(request.POST)
        if form.is_valid():
            form.save()
            return redirect('list_books2')
        else:
            form = BookForm()
    return render(request, 'bookmodule/addbook2.html', {'form':form})

def editbook2(request, id):
    book = get_object_or_404(Book, id=id)
    if request.method == "POST":
        form = BookForm(request.POST, instance = book)
        if form.is_valid():
            form.save()
            return redirect('list_books2')
    else:
        form = BookForm(instance = book)
    return render(request, 'bookmodule/editbook2.html', {'form':form})
```

- Bottom Editor:** Shows a Python view file (`views.py`) with the following code:

```
path('about/', views.about, name='books_about'),
path('about2/', views.about2, name='books_about2'),
path('about3/', views.about3, name='books_about3'),
path('about4/', views.about4, name='books_about4'),
path('about5/text/formatting/', views.formatting, name='books_formatting'),
path('about5/listing/', views.listing, name='books_listing'),
path('about5/tables/', views.tables),
path('about5/search/', views.search),
path('about5/complex_query/', views.complex_query),
path('about5/complex_query2/', views.complex_query),
path('lab9/tasks1/', views.task1),
path('lab9/tasks2/', views.task2),
path('lab9/tasks3/', views.task3),
path('lab9/tasks4/', views.task4),
path('lab9/tasks5/', views.task5),
path('lab9/tasks6/', views.task6),
path('lab9/tasks7/', views.task7),
path('lab9/tasks8/', views.task8),
path('lab9/tasks9/', views.task9),
path('lab9/tasks10/', views.task10),
path('lab9/tasks11/', views.task11),
path('lab9/tasks12/', views.task12),
path('lab9/tasks13/', views.task13),
path('lab9/tasks14/', views.task14),
path('lab9/tasks15/', views.task15),
path('lab9/tasks16/', views.task16),
path('lab9/tasks17/', views.task17),
path('lab9/tasks18/', views.task18),
path('lab9/tasks19/', views.task19),
path('lab9/tasks20/', views.task20),
path('lab9/tasks21/', views.task21),
path('lab9/tasks22/', views.task22),
path('lab9/tasks23/', views.task23),
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path('lab9/tasks38/', views.task38),
path('lab9/tasks39/', views.task39),
path('lab9/tasks40/', views.task40),
path('lab9/tasks41/', views.task41),
path('lab9/tasks42/', views.task42),
path('lab9/tasks43/', views.task43),
path('lab9/tasks44/', views.task44),
path('lab9/part1/listbooks', views.listbooks, name='list_books'),
path('lab9/part1/addbook', views.addbook, name='add_book'),
path('lab9/part1/editbook', views.editbook, name='edit_book'),
path('lab9/part1/deletebook/', views.deletebook, name='delete_book'),
path('lab9/part2/listbooks2', views.listbooks2, name='list_books2'),
path('lab9/part2/addbook2', views.addbook2, name='add_book2'),
path('lab9/part2/editbook2/', views.editbook2, name='edit_book2'),
```

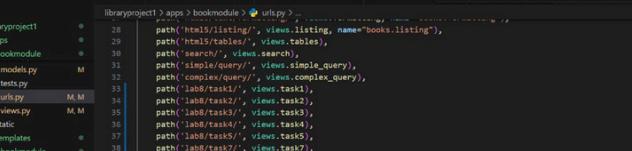
Task 3 Output

The image displays two side-by-side browser windows. The left window shows a 'List Books Page' at the URL 127.0.0.1:8000/books/lab9_part2/listbooks2. It contains a table with 20 rows of book data, each with columns for title, author, and two buttons: 'edit this book' and 'delete this book'. The right window shows an 'Edit Book Page' at the URL 127.0.0.1:8000/books/lab9_part2/editbook2/102. It has fields for 'Title' (Joud's Book), 'Author' (Joud Alblaihd), and an 'Update' button. Below the form is a message: 'This page was created by joud'.

Book Title	Author	Action	Action
Curious George	Markus Beatty	edit this book	delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plaschke	edit this book	delete this book
Short Sharp Shock (Kurz und schmerzlos)	Tracee Tunayan	edit this book	delete this book
Parent Trap, The	Harv Penner	edit this book	delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book	delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book	delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book	delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Okami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book	delete this book
Bio Zombie (Sun fua sau si)	Haslett Grenane	edit this book	delete this book
Larks on a String (Skrivanci na niti)	Paola Strowger	edit this book	delete this book
Space Jam	Ginger Schnitter	edit this book	delete this book
Juvenile Court	Tripp Fairhead	edit this book	delete this book
Wishful Thinking	Gretta Seymark	edit this book	delete this book
Joud's Book	Joud Alblaihd	edit this book	delete this book

Task 4

Code

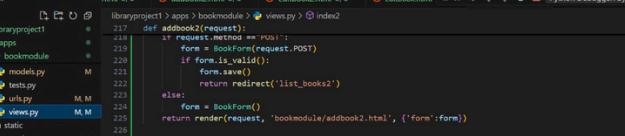


The screenshot shows a code editor interface with a sidebar titled "EXPLORER". The sidebar lists several projects and files:

- CS451
- libraryproject1
 - apps
 - bookmodule
 - models.py
 - tests.py
- uris.py
- views.py
- static
- templates
 - aboutus.html
 - addbook.html
 - addbook2.html
 - book1.html
 - editbook.html
 - editbook2.html
 - formatting.html
 - index.html
 - links.html
 - list_books.html
 - listbooks.html
 - listbooks2.html
 - listing.html

The main editor area displays the "urls.py" file from the "bookmodule" app. The code defines several URL patterns using regular expressions and views:

```
libraryproject1> apps> bookmodule> urls.py ->
  18 path('list/', listing, name='books.listing'),
  19 path('html5/tables/', views.listing, name='books.listing'),
  20 path('search/', views.search),
  21 path('simple_query/', views.simple_query),
  22 path('complex_query/', views.complex_query),
  23 path('lab9/task1/', views.task1),
  24 path('lab9/task2/', views.task2),
  25 path('lab9/task3/', views.task3),
  26 path('lab9/task4/', views.task4),
  27 path('lab9/task5/', views.task5),
  28 path('lab9/task6/', views.task6),
  29 path('lab9/task7/', views.task7),
  30 path('lab9/task11/', views.task11),
  31 path('lab9/task22/', views.task22),
  32 path('lab9/task33/', views.task33),
  33 path('lab9/task44/', views.task44),
  34 path('lab9/part1/addbook1/', views.listbooks, name='list_books'),
  35 path('lab9/part1/addbook1/addbook', name='add_book'),
  36 path('lab9/part1/editbook<int:id>', views.editbook, name='edit_book'),
  37 path('lab9/part1/deletebook<int:id>', views.deletebook, name='delete_book'),
  38 path('lab9/part2/listbook2/', views.listbooks2, name='list_books2'),
  39 path('lab9/part2/addbook2/', views.addbook2, name='add_book2'),
  40 path('lab9/part2/editbook2<int:id>', views.editbook2, name='edit_book2'),
  41 path('lab9/part2/deletebook2<int:id>', views.deletebook, name='delete_book2'),
```



The screenshot shows a Python Django application running in a Visual Studio Code (VS Code) window. The project structure on the left includes a 'bookmodule' folder containing 'models.py', 'tests.py', 'urls.py', and 'views.py'. The 'views.py' file is currently open and displays code for handling book creation and editing. The right side of the screen shows the Python Debugger interface, with the 'Django' tab selected. The code editor on the right shows the 'editbook2.html' template being debugged.

```
File Edit Selection View Go Run ... < > .\csipn

EXPLORER ... html U U addbook2.html U U editbook2.html U U editbook.html S I + _ Python Debugger: Django ... 

CSIPN
libraryproject | appx | bookmodule | views.py > index2
217
218 def addbook2(request):
219     if request.method == "POST":
220         form = BookForm(request.POST)
221         if form.is_valid():
222             form.save()
223             return redirect('list_books2')
224
225         else:
226             form = BookForm()
227             return render(request, 'bookmodule/addbook2.html', {'form':form})
228
229
230 def editbook2(request, id):
231     book = get_object_or_404(Book, id=id)
232     if request.method == "POST":
233         form = BookForm(request.POST, instance = book)
234         if form.is_valid():
235             form.save()
236             return redirect('list_books2')
237
238         else:
239             form = BookForm(instance = book)
240             return render(request, 'bookmodule/editbook2.html', {'form':form})
241
242
243 def listbook2(request):
244     book = get_object_or_404(Book, id=id)
245     book.delete()
246
247     return redirect('list_books2')

> OUTLINE
```

Task 4 Output

The image shows two side-by-side browser windows displaying a list of books. Both windows have a header "List of Books Page" and a URL "127.0.0.1:8000/books/lab9_part2/listbooks2".

Left Window Data:

Book Title	Author	Action Buttons
Male Domination	Maurice Burner	edit this book delete this book
Curious George	Markus Beatty	edit this book delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plisscke	edit this book delete this book
Short Sharp Shock (Kurz und schmerzos)	Tracee Tumayan	edit this book delete this book
Parent Trap, The	Hav Pearn	edit this book delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Okami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book delete this book
Bio Zombie (Sun faa sau si)	Haslett Gremane	edit this book delete this book
Larks on a String (Skrivanci na niti)	Paola Stronger	edit this book delete this book
Space Jam	Ginger Schutter	edit this book delete this book
Juvenile Court	Tripp Fairhead	edit this book delete this book
Wishful Thinking	Gretta Seymark	edit this book delete this book

This page was created by Joud
127.0.0.1:8000/book/lab9_part2/deletebook2/102

Right Window Data:

Book Title	Author	Action Buttons
Curious George	Markus Beatty	edit this book delete this book
Bye Bye Brazil (Bye Bye Brasil)	Kerstin Plisscke	edit this book delete this book
Short Sharp Shock (Kurz und schmerzos)	Tracee Tumayan	edit this book delete this book
Parent Trap, The	Hav Pearn	edit this book delete this book
Blackadder Back & Forth	Bartholemey Cooke	edit this book delete this book
Pirates of the Caribbean: Dead Man's Chest	Beatrice Casali	edit this book delete this book
Doctor and the Devils, The	Vladimir Stainland	edit this book delete this book
Lone Wolf and Cub: Baby Cart in Peril (Kozure Okami: Oya no kokoro ko no kokoro)	Betty Ruddlesden	edit this book delete this book
Bio Zombie (Sun faa sau si)	Haslett Gremane	edit this book delete this book
Larks on a String (Skrivanci na niti)	Paola Stronger	edit this book delete this book
Space Jam	Ginger Schutter	edit this book delete this book
Juvenile Court	Tripp Fairhead	edit this book delete this book
Wishful Thinking	Gretta Seymark	edit this book delete this book
Joud's Book	Joud Alblaihd	edit this book delete this book

This page was created by Joud
127.0.0.1:8000/book/lab9_part2/deletebook2/102