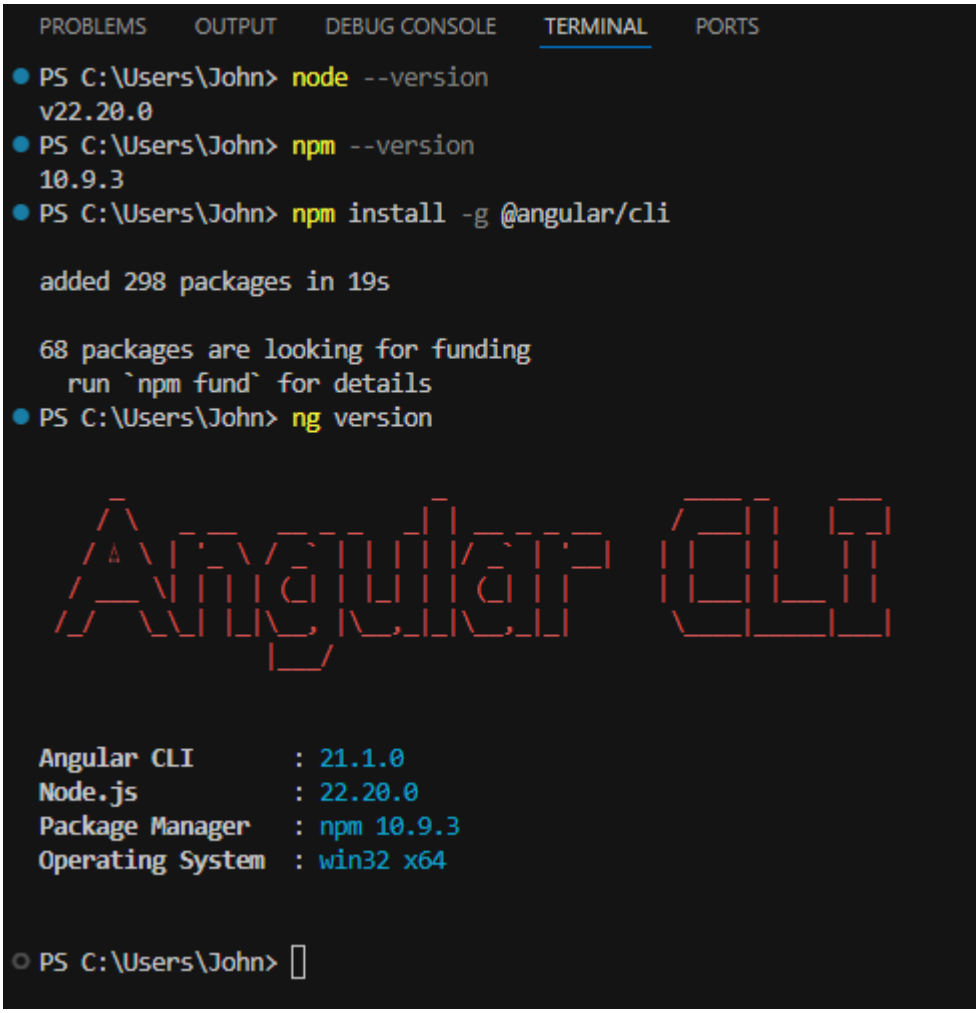
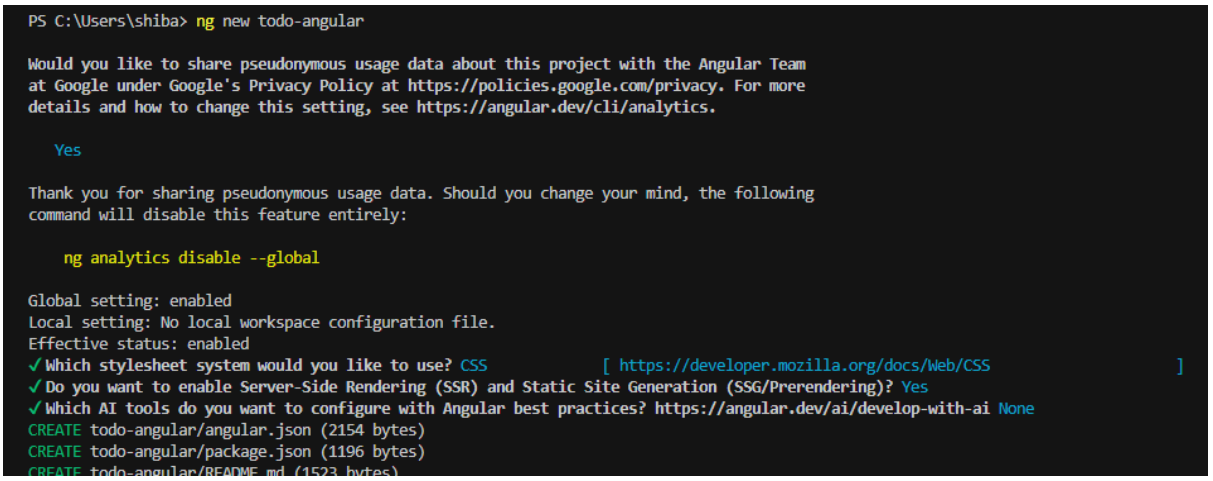
PARTE 1: Instalación de Angular CLI

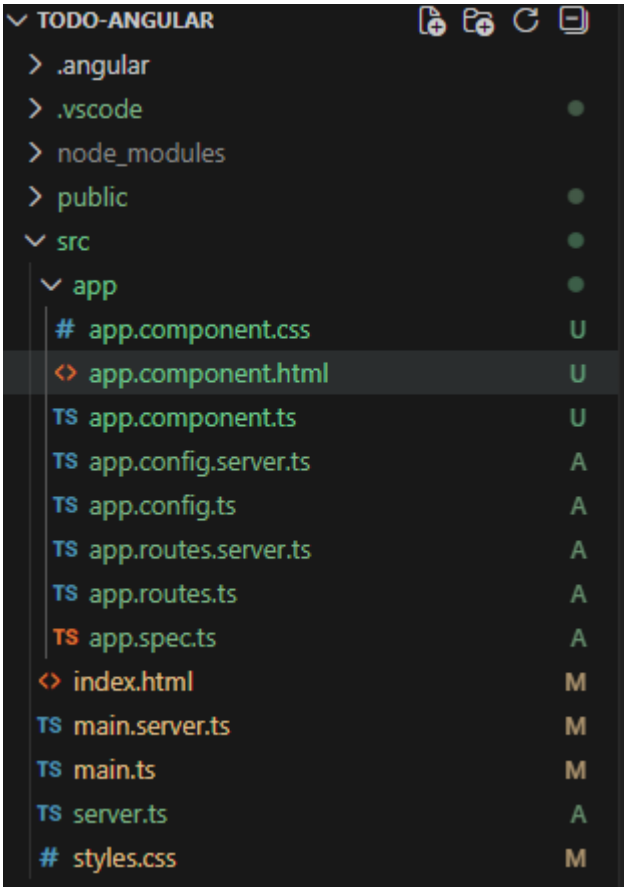




PARTE 2: Crear el Proyecto

- me he olvidado hacer capturas de pantall durante la creación del proyecto

PARTE 3: Estructura del Proyecto Angular



EJERCICIO 1: Entender el Componente

```
  }
  deleteTodo(id: number) {
    this.todos = this.todos.filter(t => t.id !== id);
  }
  toggleTodo(id: number) {
    const todo = this.todos.find(t => t.id === id);
    if (todo) {
      todo.completed = !todo.completed;
    }
  }
  clearCompleted() {
    this.todos = this.todos.filter(t => !t.completed);
  }
  getFilteredTodos(): Todo[] {
    if (this.currentFilter === 'active') {
      return this.todos.filter(t => !t.completed);
    } else if (this.currentFilter === 'completed') {
      return this.todos.filter(t => t.completed);
    } else {
      return this.todos;
    }
  }
  getActiveCount(): number {
    return this.todos.filter(t => !t.completed).length;
  }
}

```

EJERCICIO 2: Crear el Template

src > app > app.component.html > ...

```html
<div class="container">
  <h1>{{ title }}</h1>
  <div class="input-section">
    <input type="text" [(ngModel)]="newTodoText" (keyup.enter)="addTodo()" placeholder="Nueva tarea...">
    <button (click)="addTodo()">Añadir</button>
  </div>
  <div class="filters">
    <button [class.active]="currentFilter === 'all'" (click)="currentFilter = 'all'">
      Todas
    </button>
    <button [class.active]="currentFilter === 'active'" (click)="currentFilter = 'active'">
      Activas
    </button>
    <button [class.active]="currentFilter === 'completed'" (click)="currentFilter = 'completed'">
      Completadas
    </button>
  </div>
  <ul class="todo-list">
    <li *ngFor="let todo of getFilteredTodos()" [class.completed]="todo.completed" class="todo-item">
      <input type="checkbox" [checked]="todo.completed" (change)="toggleTodo(todo.id)" class="todo-checkbox">
      <span class="todo-text">{{ todo.text }}</span>
      <button (click)="deleteTodo(todo.id)" class="delete-btn">
        Eliminar
      </button>
    </li>
  </ul>
  <div class="footer">
    <span>{{ getActiveCount() }} tareas pendientes</span>
    <button (click)="clearCompleted()">Limpiar completadas</button>
  </div>
</div>
```

EJERCICIO 3:

src > app > # app.component.css > .container

```css
.container {
    max-width: 600px;
    margin: 50px auto;
    padding: 20px;
    background: white;
    border-radius: 8px;
    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
}

h1 {
    text-align: center;
    color: #333;
}

.input-section {
    display: flex;
    gap: 10px;
    margin: 20px 0;
}

input[type="text"] {
    flex: 1;
    padding: 10px;
    border: 2px solid #ddd;
    border-radius: 4px;
    font-size: 16px;
}

button {
    padding: 10px 20px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    font-size: 16px;
}

.input-section button {
    background: #4CAF50;
    color: white;
}
```

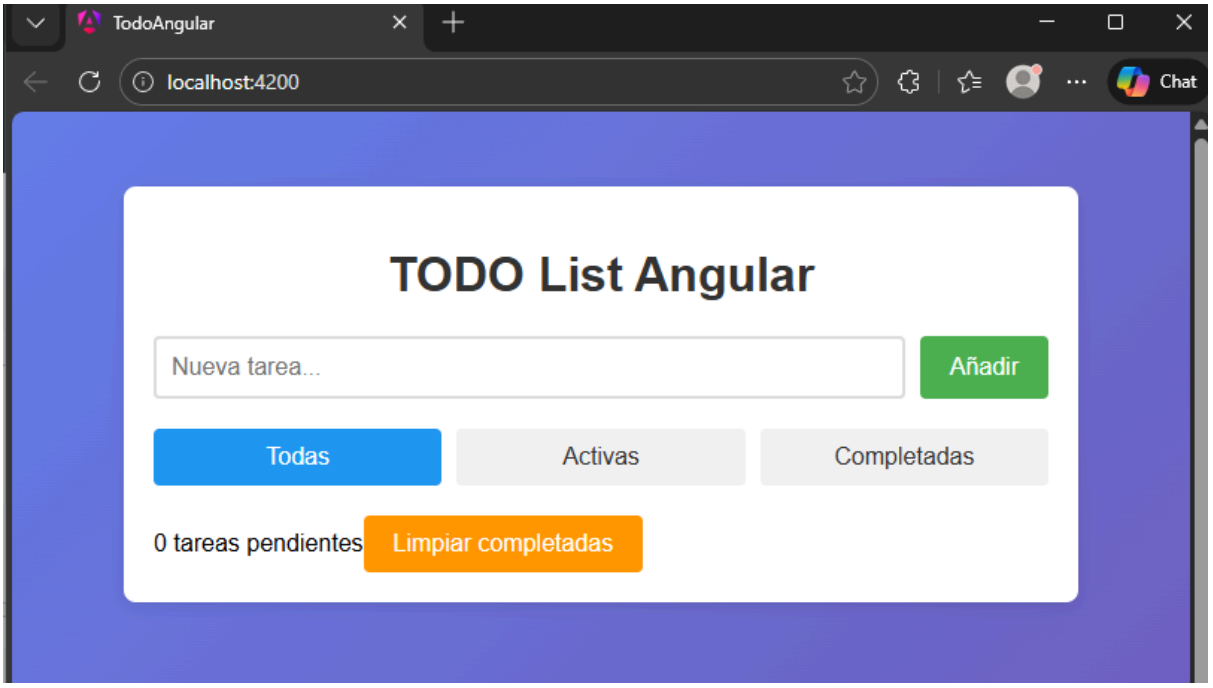
src > app > # app.component.css > .container

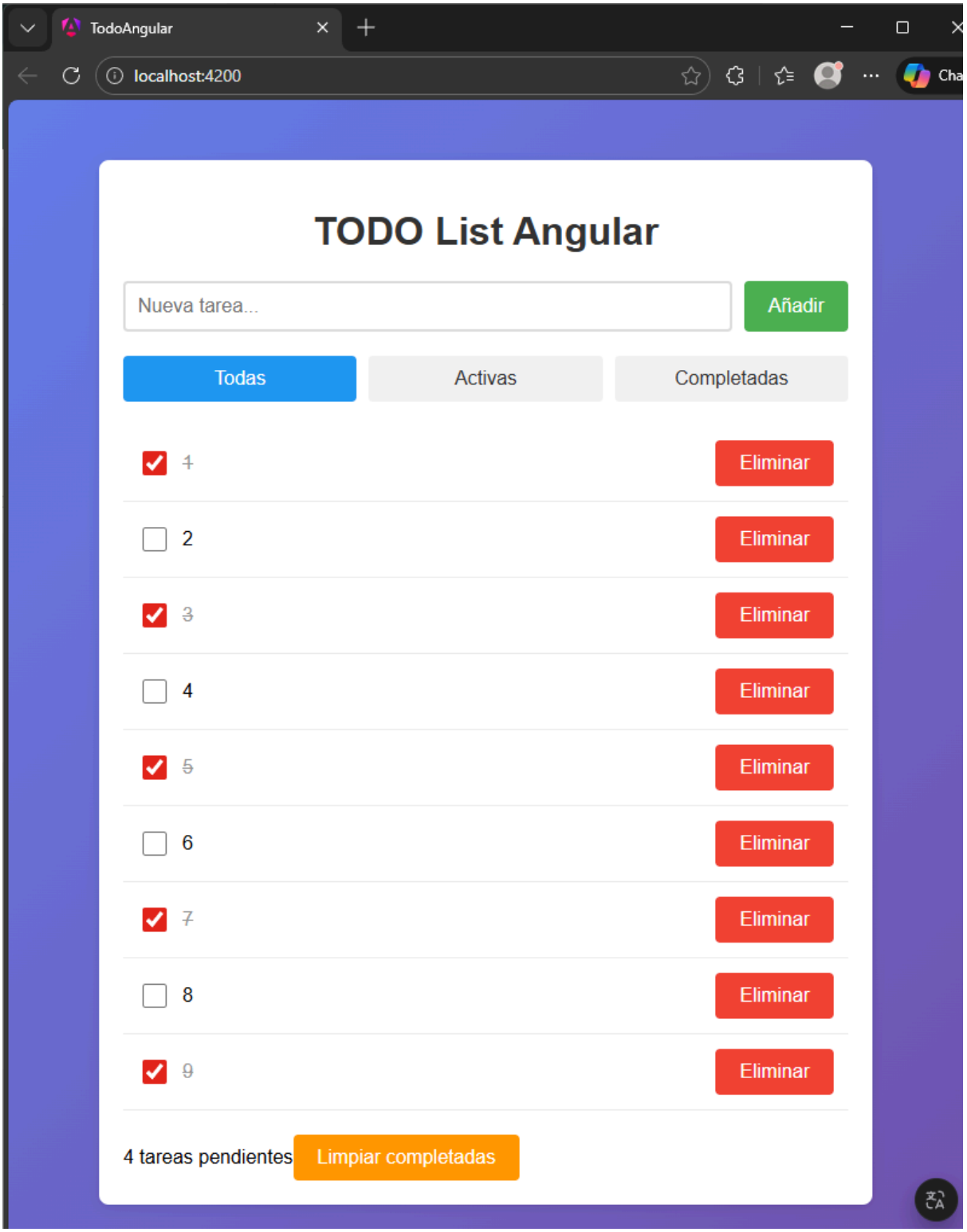
```css
}

.filters {
    display: flex;
    gap: 10px;
    margin: 20px 0;
}

.filters button {
    flex: 1;
    background: #f0f0f0;
    color: #333;
}

.filters button.active {
    background: #2196F3;
    color: white;
}

.todo-list {
    list-style: none;
    padding: 0;
    margin: 20px 0;
}

.todo-item {
    display: flex;
    align-items: center;
    gap: 10px;
    padding: 12px;
    border-bottom: 1px solid #eee;
}

.todo-item.completed .todo-text {
    text-decoration: line-through;
    color: #999;
}

.todo-checkbox {
    width: 20px;
    height: 20px;
```

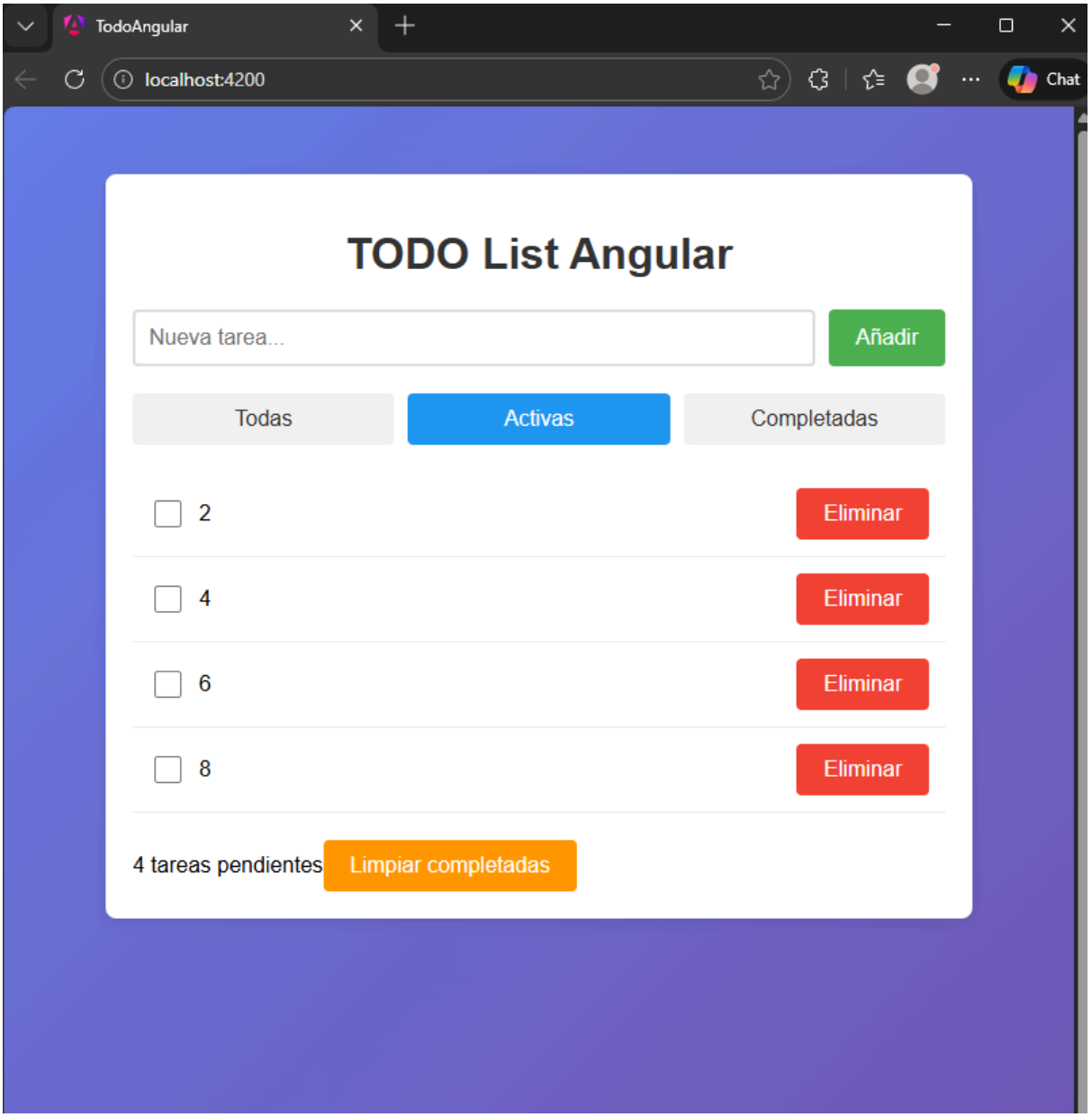
```
81  }
82
83  .todo-text {
84      flex: 1;
85  }
86
87  .delete-btn {
88      background: #f44336;
89      color: white;
90  }
91
92  footer {
93      display: flex;
94      justify-content: space-between;
95      align-items: center;
96      margin-top: 20px;
97  }
98
99  .footer button {
100     background: #ff9800;
101     color: white;
102 }
```

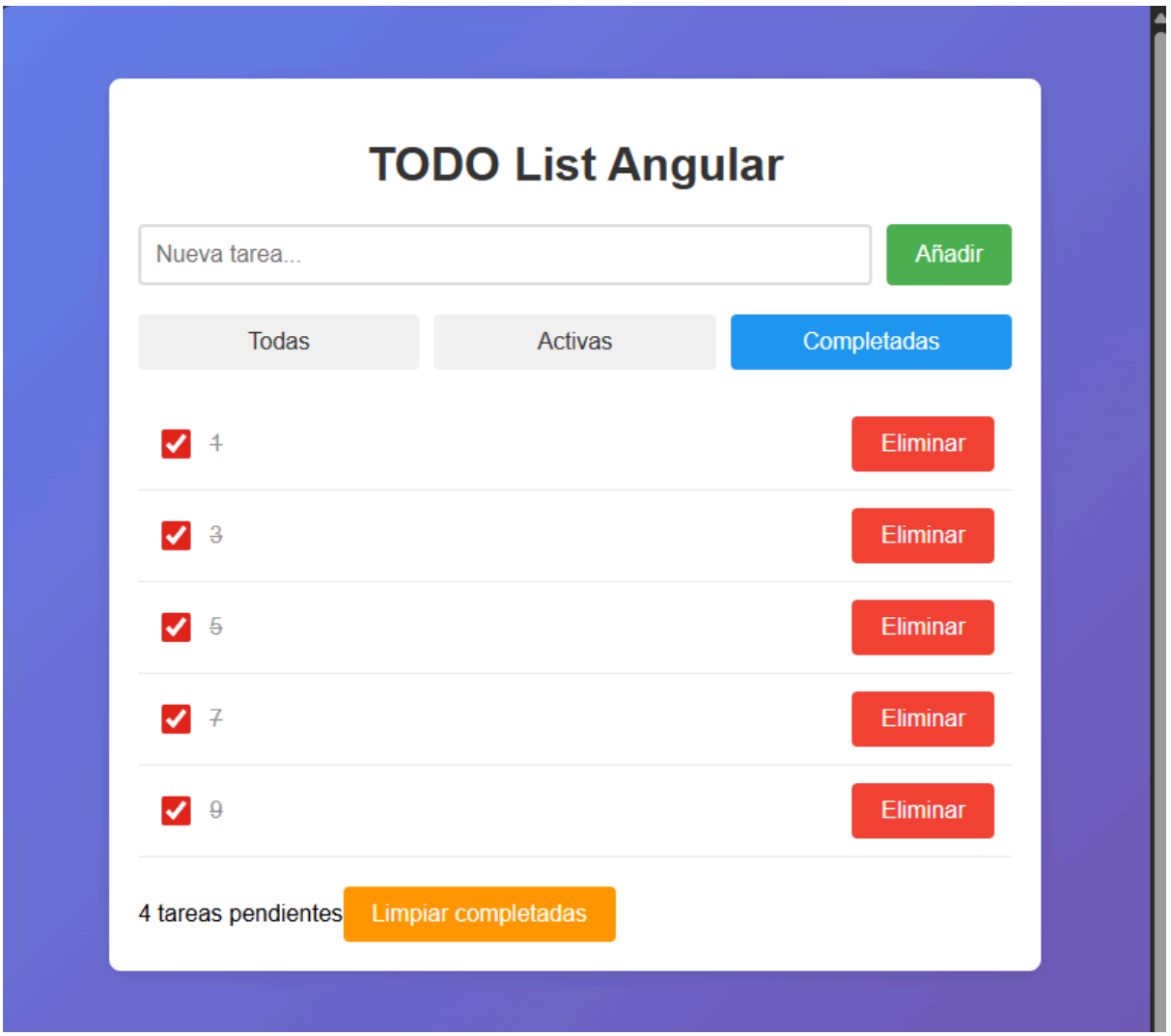
EJERCICIO 4: Probar la Aplicación

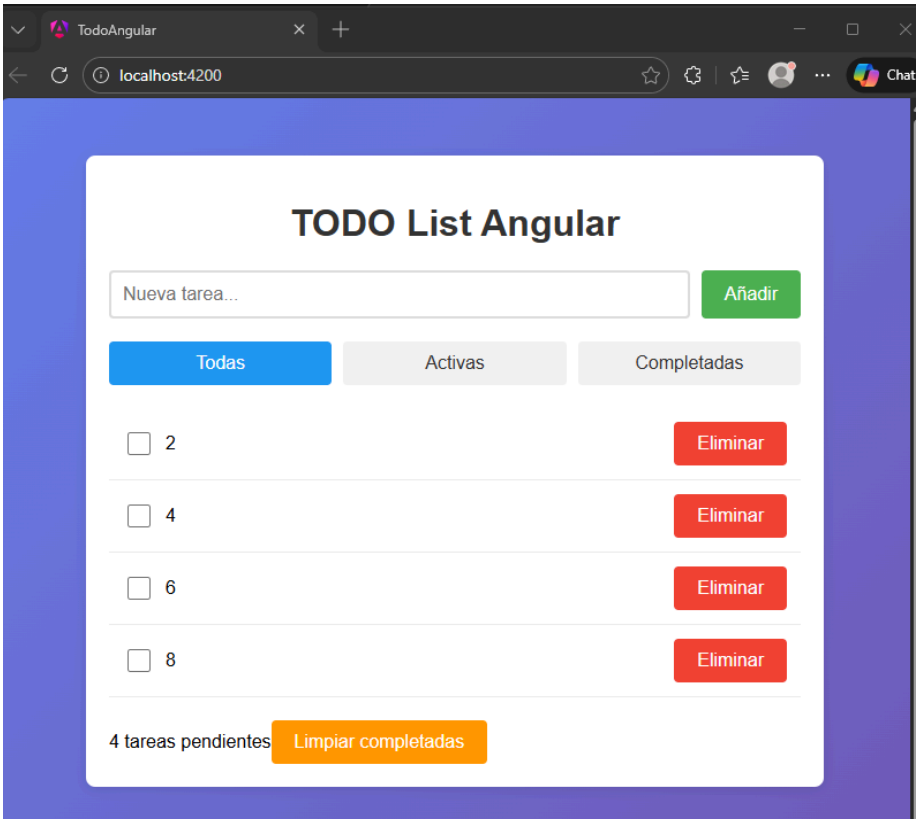
```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\shiba\todo-angular> ng serve
Browser bundles
Initial chunk files   | Names           |  Raw size
main.js               | main            |  13.91 kB |
styles.css            | styles          | 261 bytes |

                      | Initial total   |  14.17 kB


Server bundles
Initial chunk files   | Names           |  Raw size
main.server.mjs       | main.server     |  15.17 kB |
server.mjs            | server          |   1.81 kB |
polyfills.server.mjs  | polyfills.server| 243 bytes |

Application bundle generation complete. [3.849 seconds] - 2026-01-26T12:54:32.357Z

Watch mode enabled. Watching for file changes...
NOTE: Raw file sizes do not reflect development server per-request transformations.
  ➜  Local:   http://localhost:4200/
  ➜  press h + enter to show help
```




TodoAngular
localhost:4200
TODO List Angular
Nueva tarea...
Añadir
Todas
Activas
Completadas
1
Eliminar
2
Eliminar
3
Eliminar
4
Eliminar
5
Eliminar
6
Eliminar
7
Eliminar
8
Eliminar
9
Eliminar
4 tareas pendientes
Limpiar completadas


TodoAngular
localhost:4200
Chat
TODO List Angular
Nueva tarea...
Añadir
Todas
Activas
Completadas
2
Eliminar
4
Eliminar
6
Eliminar
8
Eliminar
4 tareas pendientes
Limpiar completadas

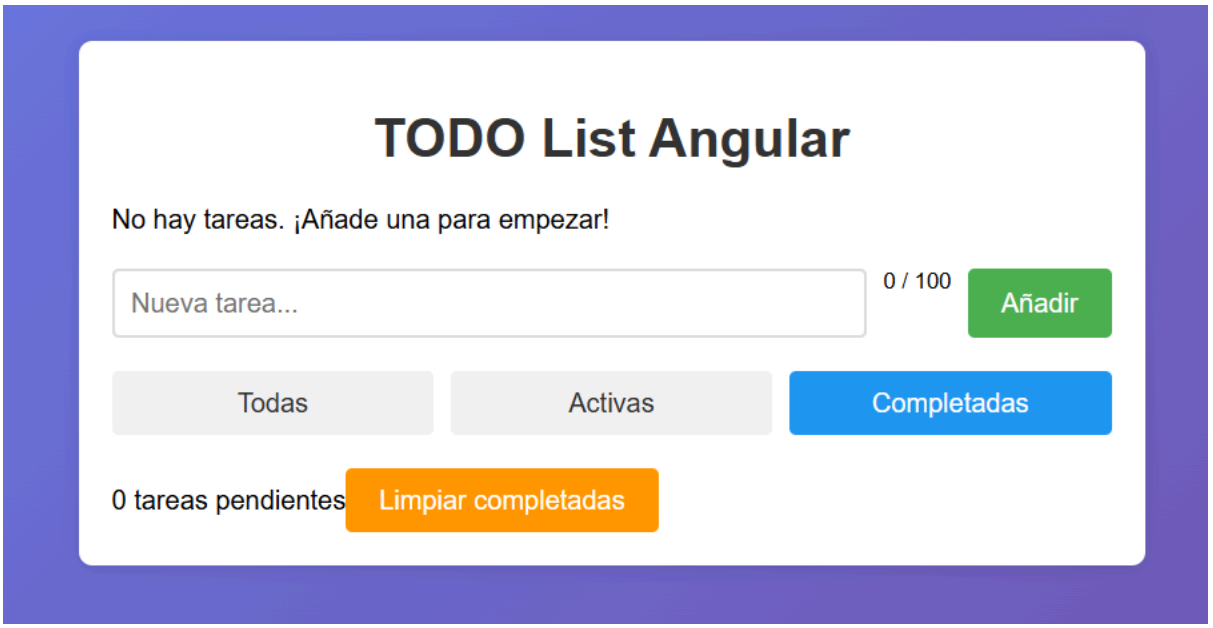

TODO List Angular
Nueva tarea...
Añadir
Todas
Activas
Completadas
1
Eliminar
3
Eliminar
5
Eliminar
7
Eliminar
9
Eliminar
4 tareas pendientes
Limpiar completadas


TodoAngular
localhost:4200
TODO List Angular
Nueva tarea...
Añadir
Todas
Activas
Completadas
2
Eliminar
4
Eliminar
6
Eliminar
8
Eliminar
4 tareas pendientes
Limpiar completadas

Retos extras

todo-angular > src > app > app.component.html > div.container

```html
<div class="container">
  <h1>{{ title }}</h1>

<div *ngIf="todos.length === 0" class="empty-state">
    No hay tareas. ¡Añade una para empezar!
  </div>

  <div class="input-section">
    <input
      type="text"
      [(ngModel)]="newTodoText"
      (keyup.enter)="addTodo()"
      [class.error]="newTodoText.length > 100"
      placeholder="Nueva tarea...">

    <span *ngIf="newTodoText.length > 100" class="error-msg">
      Máximo 100 caracteres
    </span>

    <small>{{ newTodoText.length }} / 100</small>

    <button
      (click)="addTodo()"
      [disabled]="newTodoText.trim() === '' || newTodoText.length > 100">
      Añadir
    </button>
  </div>
```

```html
<div class="filters">
  <button [class.active]="currentFilter === 'all'" (click)="currentFilter = 'all'">
    Todas
  </button>
  <button [class.active]="currentFilter === 'active'" (click)="currentFilter = 'active'">
    Activas
  </button>
  <button [class.active]="currentFilter === 'completed'" (click)="currentFilter = 'completed'">
    Completadas
  </button>
</div>


<ul class="todo-list">
  <li *ngFor="let todo of getFilteredTodos()" [class.completed]="todo.completed" class="todo-item">
    <input type="checkbox" [checked]="todo.completed" (change)="toggleTodo(todo.id)" class="todo-checkbox">
    <span class="todo-text">{{ todo.text }}</span>
    <button (click)="deleteTodo(todo.id)" class="delete-btn">
      Eliminar
    </button>
  </li>
</ul>
```

```
54      <div class="footer">
55        <span>{{ getActiveCount() }} tareas pendientes</span>
56        <button (click)="clearCompleted()">Limpiar completadas</button>
57      </div>
58
59
60
61    </div>
62
```