Experiment 3
Develop an admin dashboard with CSS Grid layout and dynamic theme switching.

Code

1. HTML-

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Admin Dashboard</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>

  <div class="dashboard-container">
    <header class="header">
      <div class="header-search">
        <input type="search" placeholder="Search...">
      </div>
      <div class="header-actions">
        <button id="theme-switcher" class="theme-btn">🟡</button>
        <div class="user-profile">
          <span  class="profile-icon">⚖</span>
        </div>
      </div>
    </header>

    <aside class="sidebar">
      <div class="sidebar-brand">
        <h2>Dashboard</h2>
      </div>
      <nav class="sidebar-nav">
        <ul>
          <li class="active"><a href="#">🎉 Overview</a></li>
          <li><a href="#">🥟 Products</a></li>
          <li><a href="#">🪐 Orders</a></li>
          <li><a href="#">+ Customers</a></li>
          <li><a href="#">▯ Analytics</a></li>
          <li><a href="#"> ◎ Settings</a></li>
        </ul>
      </nav>
    </aside>

    <main class="main-content">
      <h1>Dashboard Overview</h1>
```

```html
<div class="card-container">
    <div class="card">
        <h3>Total Sales</h3>
        <p>₹15,48,750</p>
        <span  class="card-icon">x</span>
    </div>
    <div class="card">
        <h3>New Users</h3>
        <p>3,256</p>
        <span class="card-icon">🎅</span>
    </div>
    <div class="card">
        <h3>New Orders</h3>
        <p>8,124</p>
        <span class="card-icon">🟦</span>
    </div>
     <div class="card">
        <h3>Pending Tasks</h3>
        <p>12</p>
        <span         class="card-icon">📙
    </div>
</div>

<div class="content-widgets">
    <div class="widget chart-widget">
        <h3>Sales Analytics</h3>
```

2. CSS-

```css
/* --- THEME AND FONT SETUP --- */
:root {
  --bg-color: #f4f7fe;
  --main-bg-color: #ffffff;
  --sidebar-bg-color: #1f2937;
  --text-color: #333333;
  --sidebar-text-color: #e5e7eb;
  --sidebar-active-link: #3b82f6;
  --border-color: #e5e7eb;
  --shadow-color: rgba(0, 0, 0, 0.05);
}

[data-theme="dark"] {
  --bg-color: #111827;
  --main-bg-color: #1f2937;
  --sidebar-bg-color: #111827;
  --text-color: #e5e7eb;
  --sidebar-text-color: #e5e7eb;
  --sidebar-active-link: #3b82f6;
  --border-color: #374151;
  --shadow-color: rgba(0, 0, 0, 0.2);
```

```css
        }

        body {
          font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
          background-color: var(--bg-color);
          color: var(--text-color);
          margin: 0;
          transition: background-color 0.3s, color 0.3s;
        }

        /* --- GRID LAYOUT SETUP --- */
        .dashboard-container {
          display: grid;
          grid-template-columns: 240px 1fr;
          grid-template-rows: auto 1fr;
          grid-template-areas:
            "sidebar header"
            "sidebar main-content";
          height: 100vh;
        }

        .header { grid-area: header; }
        .sidebar { grid-area: sidebar; }
        .main-content { grid-area: main-content; }

        /* --- HEADER --- */
        .header {
          background-color: var(--main-bg-color);
          border-bottom: 1px solid var(--border-color);
          padding: 0 2rem;
          display: flex;
          justify-content: space-between;
          align-items: center;
          transition: background-color 0.3s, border-color 0.3s;
        }
        .header-search input {
          padding: 0.6rem 1rem;
          border-radius: 20px;
          border: 1px solid var(--border-color);
          background-color: var(--bg-color);
          color: var(--text-color);
          min-width: 300px;
        }
        .header-actions { display: flex; align-items: center; gap: 1.5rem; }
        .theme-btn {
          background: none;
          border: none;
          cursor: pointer;
          font-size: 1.5rem;
        }
```

```css
.user-profile { display: flex; align-items: center; gap: 0.5rem; }
.user-profile img { width: 40px; height: 40px; border-radius: 50%; }

/* --- SIDEBAR --- */
.sidebar {
    background-color: var(--sidebar-bg-color);
    color: var(--sidebar-text-color);
    padding: 1.5rem;
    display: flex;
    flex-direction: column;
}
.sidebar-brand h2 { margin: 0; text-align: center; }
.sidebar-nav { margin-top: 2rem; }
.sidebar-nav ul { list-style: none; padding: 0; margin: 0; }
.sidebar-nav li a {
    display: block;
    color: var(--sidebar-text-color);
    text-decoration: none;
    padding: 1rem;
    border-radius: 8px;
    margin-bottom: 0.5rem;
    transition: background-color 0.2s, color 0.2s;
}
.sidebar-nav li.active a, .sidebar-nav li a:hover {
    background-color: var(--sidebar-active-link);
    color: #ffffff;
}

/* --- MAIN CONTENT --- */
.main-content {
    overflow-y: auto;
    padding: 2rem;
}

/* Stat Cards */
.card-container {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(220px, 1fr));
    gap: 1.5rem;
    margin-top: 1rem;
}
.card {
    background-color: var(--main-bg-color);
    padding: 1.5rem;
    border-radius: 12px;
    box-shadow: 0 4px 15px var(--shadow-color);
    position: relative;
    transition: background-color 0.3s;
}
.card h3 { margin-top: 0; font-size: 1rem; color: #888; }
```

```css
.card p { font-size: 2rem; font-weight: bold; margin: 0.5rem 0; }
.card-icon {
  font-size: 2.5rem;
  position: absolute;
  top: 1.5rem;
  right: 1.5rem;
  opacity: 0.2;
}

/* Content Widgets (Charts & Tables) */
.content-widgets {
  margin-top: 2rem;
  display: grid;
  grid-template-columns: 2fr 1fr;
  gap: 1.5rem;
}
.widget {
  background-color: var(--main-bg-color);
  padding: 1.5rem;
  border-radius: 12px;
  box-shadow: 0 4px 15px var(--shadow-color);
  transition: background-color 0.3s;
}
.widget h3 { margin-top: 0; }
.chart-widget img { width: 100%; margin-top: 1rem; }
.table-widget table { width: 100%; border-collapse: collapse; }
.table-widget th, .table-widget td {
  padding: 0.75rem;
  text-align: left;
  border-bottom: 1px solid var(--border-color);
}
.status { padding: 0.2rem 0.5rem; border-radius: 10px; font-size: 0.8rem; }
.status.shipped { background-color: #e0f2fe; color: #0ea5e9; }
.status.delivered { background-color: #dcfce7; color: #22c55e; }
.status.pending { background-color: #fffbeb; color: #f59e0b; }

.profile-icon {
  font-size: 1.5rem;
}
/* --- RESPONSIVE DESIGN --- */
@media (max-width: 768px) {
  .dashboard-container {
    grid-template-columns: 1fr;
    grid-template-rows: auto auto 1fr;
    grid-template-areas:
      "header"
      "sidebar"
      "main-content";
  }
  .sidebar { height: auto; }
```

```
        .content-widgets { grid-template-columns: 1fr; }
        .header-search { display: none; }
    }
```

3. Javascript-

```javascript
document.addEventListener('DOMContentLoaded', () => {
    const themeSwitcher = document.getElementById('theme-switcher');
    const htmlElement = document.documentElement; // Get the <html> element

    // 1. Check for saved theme in localStorage and apply it
    on page load const savedTheme =
    localStorage.getItem('theme');
    if (savedTheme) {
        htmlElement.setAttribute('data-theme', savedTheme);
        // Update button text to reflect
        the current theme if (savedTheme
        === 'dark') {
            themeSwitcher.textContent = '●'; // Sun icon for light mode
        } else {
            themeSwitcher.textContent = 'F '; // Moon icon for dark mode
        }
    } else {
        // Default to light theme if nothing is saved
        themeSwitcher.textContent = 'F';
    }

    // 2. Add event listener for the theme switcher button
    themeSwitcher.addEventListener('click', () => {
        // Get the current theme
        const currentTheme = htmlElement.getAttribute('data-theme');

        // Toggle the theme
        if (currentTheme === 'dark') {
            // Switch to light mode
            htmlElement.removeAttribute('data-
            theme');
            localStorage.removeItem('theme');
            themeSwitcher.textContent = 'F'; // Show
            moon icon
        } else {
            // Switch to dark mode
            htmlElement.setAttribute('data-theme',
            'dark'); localStorage.setItem('theme',
            'dark'); themeSwitcher.textContent = '●';
```

```
                                // Show sun icon
        }
    });
                });
```
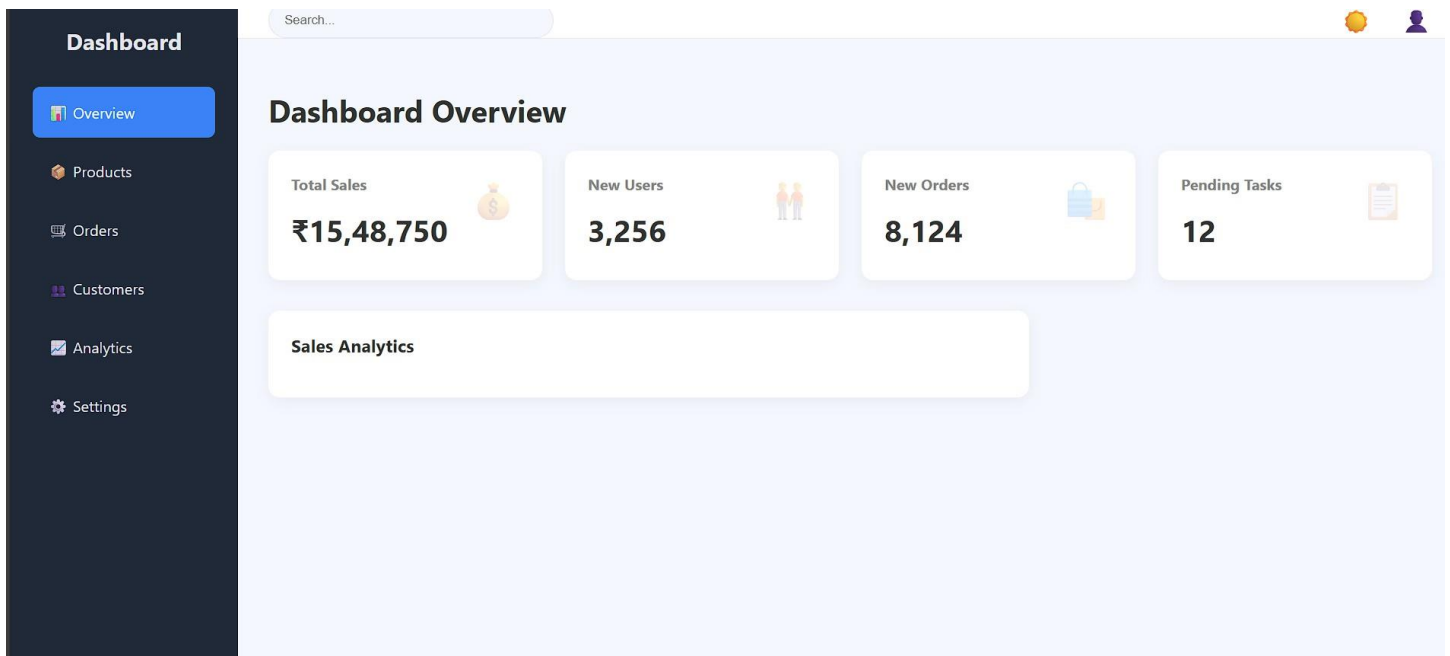
Output
Experiment 3

Figure1. Output of experiment 3