the Python program:

```
def calculate_cooling_load(building_type, num_occupants):
    if building_type.lower() == "residential":
        cooling_load = 100 * num_occupants
    elif building_type.lower() == "commercial":
        cooling_load = 150 * num_occupants
    else:
        raise ValueError("Invalid building type. Please enter 'residential' or 'commercial'.")

    return cooling_load

def main():
    # Input from the user
    building_area = float(input("Enter the area of the building (in square meters): "))
    num_occupants = int(input("Enter the number of occupants in the building: "))
    building_type = input("Enter the type of building (residential/commercial): ")
    outdoor_temp_celsius = float(input("Enter the outdoor temperature (in Celsius): "))
    indoor_temp_celsius = float(input("Enter the indoor desired temperature (in Celsius): "))

    # Calculate cooling load based on the building type and number of occupants
    cooling_load = calculate_cooling_load(building_type, num_occupants)

    # Calculate heat transfer due to conduction
    overall_heat_transfer_coefficient = 30  # W/m²°C
    q_conduction = overall_heat_transfer_coefficient * building_area * (outdoor_temp_celsius
- indoor_temp_celsius)

    # Calculate the sensible cooling load
    sensible_cooling_load = q_conduction + cooling_load

    # Display the final sensible cooling load to the user
    print(f"\nSensible Cooling Load: {sensible_cooling_load:.2f} Watts")

if __name__ == "__main__":
    main()
```

let's create the HTML, CSS, and JavaScript code for the simple web page:

```
<!DOCTYPE html>
<html>
<head>
    <title>Cooling Load Calculator</title>
    <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
    <div class="container">
        <h1>Cooling Load Calculator</h1>
        <div class="form-group">
            <label for="buildingArea">Area of the building (in square meters):</label>
            <input type="number" id="buildingArea" required>
        </div>
        <div class="form-group">
```

```
            <label for="numOccupants">Number of occupants in the building:</label>
            <input type="number" id="numOccupants" required>
        </div>
        <div class="form-group">
            <label for="buildingType">Type of building:</label>
            <select id="buildingType" required>
                <option value="residential">Residential</option>
                <option value="commercial">Commercial</option>
            </select>
        </div>
        <div class="form-group">
            <label for="outdoorTemp">Outdoor temperature (in Celsius):</label>
            <input type="number" id="outdoorTemp" required>
        </div>
        <div class="form-group">
            <label for="indoorTemp">Indoor desired temperature (in Celsius):</label>
            <input type="number" id="indoorTemp" required>
        </div>
        <button onclick="calculateSensibleCoolingLoad()">Calculate</button>
        <p id="result"></p>
    </div>

    <script src="script.js"></script>
</body>
</html>
```

**styles.css:**

```
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    text-align: center;
    margin: 0;
    padding: 0;
}

.container {
    max-width: 500px;
    margin: 50px auto;
    background-color: #ffffff;
    padding: 20px;
    border-radius: 5px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

h1 {
    margin-bottom: 20px;
}

.form-group {
    display: flex;
```

```
    flex-direction: column;
    margin-bottom: 20px;
}

label {
    margin-bottom: 5px;
}

input[type="number"] {
    padding: 5px;
    font-size: 16px;
    border: 1px solid #ccc;
    border-radius: 3px;
}

button {
    padding: 10px 20px;
    font-size: 16px;
    background-color: #007bff;
    color: #fff;
    border: none;
    border-radius: 3px;
    cursor: pointer;
}

button:hover {
    background-color: #0056b3;
}

#result {
    margin-top: 20px;
    font-size: 18px;
    font-weight: bold;
}
```

**script.js:**

```
unction calculateSensibleCoolingLoad() {
    const buildingArea = parseFloat(document.getElementById("buildingArea").value);
    const numOccupants = parseInt(document.getElementById("numOccupants").value);
    const buildingType = document.getElementById("buildingType").value;
    const outdoorTempCelsius = parseFloat(document.getElementById("outdoorTemp").value);
    const indoorTempCelsius = parseFloat(document.getElementById("indoorTemp").value);

    // Calculate cooling load based on the building type and number of occupants
    let coolingLoad;
    if (buildingType === "residential") {
        coolingLoad = 100 * numOccupants;
    } else if (buildingType === "commercial") {
        coolingLoad = 150 * numOccupants;
    } else {
        alert("Invalid building type. Please select 'Residential' or 'Commercial'.");
        return;
    }

    // Calculate heat transfer due to conduction
    const overallHeatTransferCoefficient = 30; // W/m²°C
    const qConduction = overallHeatTransferCoefficient * buildingArea * (outdoorTempCelsius -
indoorTempCelsius);

    // Calculate the sensible cooling load
    const sensibleCoolingLoad = qConduction + coolingLoad;

    // Display the result
    document.getElementById("result").innerText = `Sensible Cooling Load:
${sensibleCoolingLoad.toFixed(2)} Watts`;
}
```