TASKS:

**Energy Consumption Data Conversion**

**>>Data Conversion:** Convert the energy consumption data, recorded in watts over 15-minuteintervals from 4th to 7th December, to kilowatt-hours (kWh). Describe the steps you took to make this conversion.

# Consumption Analysis

**>>High Consumption Identification:** Identify the top five energy-consuming circuits among the 48 different types of equipment in the building. Suggest possible reasons why these circuits

Might have high energy usage.

**>>Summary statistics:** Do a summary statistics analysis for these top five energy circuits. What can you infer from the numbers?

# Off-Hours Energy Usage

**>>Off-Hours Consumption:** Calculate the total energy consumption outside standard

Business hours (6amto7pm,Monday to Friday).What can you infer about the building's energy usage during these off-hours?

# Peak Demand Analysis

**>>Peak Demand:** Identify the peak demand periods for energy consumption in the building. How could this information be used to optimize energy usage and reduce costs?

# Trend Identification

**>>Trend Analysis:** Examine the energy data to find any significant trends or patterns.

# Environmental Impact Estimation:

Calculate the estimated carbon footprint of the building's energy usage during this period.

# Data:

* Energy data,15-minute intervals between 4th–10thDecember
* 48 meters of various types of equipment within the building