

In this Assignment i wrote a simple python code according to assignment 2 instructions

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In [3]: import csv

days = []
hours = []
consumptions = []

with open("Assignment 2.csv", "r") as file:
    reader = csv.reader(file)
    next(reader)

    for row in reader:
        days.append(int(row[0]))
        hours.append(int(row[1]))
        consumptions.append(float(row[2]))

# Group by hour
hour_groups = {}

for h, c in zip(hours, consumptions):
    if h not in hour_groups:
        hour_groups[h] = []
    hour_groups[h].append(c)

# Average per hour
hour_avg = {}
for h in hour_groups:
    hour_avg[h] = sum(hour_groups[h]) / len(hour_groups[h])

# Peak per hour
hour_peak = {}
for h in hour_groups:
    hour_peak[h] = max(hour_groups[h])

print("Grouped by Hour:")
print(hour_groups)
print(hour_avg)
print(hour_peak)

# Group by day
day_groups = {}

for d, c in zip(days, consumptions):
    if d not in day_groups:
        day_groups[d] = []
    day_groups[d].append(c)

# Total per day
day_total = {}
for d in day_groups:
    day_total[d] = sum(day_groups[d])
```

```
# Average per day
day_avg = {}
for d in day_groups:
    day_avg[d] = day_total[d] / len(day_groups[d])

print("Grouped by Day:")
print(day_groups)
print(day_total)
print(day_avg)
```

Grouped by Hour:

{1: [200.0, 700.0, 800.0, 500.0], 2: [300.0, 600.0, 700.0, 400.0], 3: [500.0, 400.0, 600.0, 650.0]}

{1: 550.0, 2: 500.0, 3: 537.5}

{1: 800.0, 2: 700.0, 3: 650.0}

Grouped by Day:

{7: [200.0, 300.0, 500.0, 700.0, 600.0, 400.0], 8: [800.0, 700.0, 600.0, 500.0, 400.0, 650.0]}

{7: 2700.0, 8: 3650.0}

{7: 450.0, 8: 608.3333333333334}