

## In this Assignment i wrote a simple python code according to assignment 3 instructions

```
In [3]: import csv

#Read Load Data
loads = []
with open('Assignment 3 load.csv', newline='') as f:
    reader = csv.reader(f)
    next(reader) # skip header
    for row in reader:
        if row and row[0].strip() != "":
            loads.append(float(row[0].strip()))

#Read Price Data
prices = []
with open('Assignment 3 price.csv', newline='') as f:
    reader = csv.reader(f)
    next(reader) # skip header
    for row in reader:
        if row and row[0].strip() != "":
            prices.append(float(row[0].strip()))

# Hours
hours = list(range(1, len(loads) + 1))

# Bill Calculation
def calc_bills(loads, prices):
    hourly = [(l / 1000) * p for l, p in zip(loads, prices)]
    total = sum(hourly)
    return hourly, total

hourly_bills, total_bill = calc_bills(loads, prices)

# Output
print("{:<4} {:<8} {:<6} {:<8}".format("Hr", "Load", "KWh", "Rs"))
for h, l, c in zip(hours, loads, hourly_bills):
    print("{:<4} {:<8.2f} {:<6.3f} {:<8.2f}".format(h, l, l/1000, c))

print(f"\nTotal Bill: {total_bill:.2f} Rs")
```

Hr	Load	KWh	Rs
1	1.00	0.001	0.00
2	2.00	0.002	0.00
3	3.00	0.003	0.01
4	4.00	0.004	0.02
5	5.00	0.005	0.03
6	6.00	0.006	0.04
7	7.00	0.007	0.05
8	8.00	0.008	0.06
9	9.00	0.009	0.08
10	10.00	0.010	0.10

Total Bill: 0.39 Rs