

## Extra Question # 04

Write a program that will calculate and print bills for the city power company. The rates vary depending on whether the usage type is **residential**, **commercial**, or **industrial**. A type of **R/r** means residential use, a type of **C/c** means commercial use, and a type of **I/i** means industrial use. **(Don't forget to check invalid usage type as in the example run.)**

The rates are computed as follows:

<b>R/r</b>	: 6.00 TL plus 0.052 TL per kwh used
<b>C/c</b>	: 60.00 TL for the <u>first 1000 kwh</u> and 0.045 TL for each <u>additional kwh</u>
<b>I/i</b>	: Rate varies depending on time of usage:
<b>Peak hours</b>	: 76.00 TL for <u>first 1000 kwh</u> and 0.065 TL for each <u>additional kwh</u>
<b>Off-peak hours</b>	: 40.00 TL for <u>first 1000 kwh</u> and 0.028 TL for each <u>additional kwh</u>

Your program should prompt the user to enter the **number of customers** and for each customer the necessary consumption figures in whole numbers of kilowatt-hours. Your program should display the amount to be paid by each customer, and the average payment for each usage type.

**Project Name:** EQ4  
**File Name:** EQ4.cpp

**Example Run 1:**

```
Please enter the number of customers: 5

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): R
Enter the kwh: 4
Please pay 6.21 TL

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): c
Enter the kwh: 1020
Please pay 60.90 TL

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): C
Enter the kwh: 980
Please pay 60.00 TL

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): I
Please enter the kwh for PEAK hours : 1250
Please enter the kwh for OFFPEAK hours: 750
Please pay 132.25 TL
```

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): i

Please enter the kwh for PEAK hours : 0

Please enter the kwh for OFFPEAK hours: 1800

Please pay 62.40 TL

The average price of the residential usage is: 6.21 TL

The average price of the commercial usage is: 60.45 TL

The average price of the industrial usage is: 97.33 TL

**Example Run2:**

Please enter the number of customers: 3

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): R

Enter the kwh: 4

Please pay 6.21 TL

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): x

!Invalid type!

Enter the usage type(R/r-Residential, C/c-Commercial, I/i-Industrial): i

Please enter the kwh for PEAK hours : 1250

Please enter the kwh for OFFPEAK hours: 750

Please pay 132.25 TL

The average price of the residential usage is: 6.21 TL

The average price of the industrial usage is: 132.25 TL