# **Problem Solving**

#### **Problem 1:**

Write a program to give the following output for the given input

Example 1:

Input: C1e7h3P4k11

Output: CeeeeeeehhhPPPPkkkkkkkkkkkkk

Example 2:

**Input:** b3c6M4d15

Output: bbbccccccMMMMdddddddddddddd

The number can be varies from 1 to 99.

The letters can be varies from a to z (or) A to Z.

## Algorithms can be used:

- Recursive Function Algorithms. (or)
- Nested Looping Algorithms.

On examining any value will be inputted and tested accordingly.

#### **Problem 2:**

Write a program to calculate the Commission of any given input.

Table for Range Data

_	From	То	Commission
0	\$1	\$400	5%
1	\$401	\$800	4%
2	\$801	\$1200	3%
3	\$1201	\$9000	2%
4	\$9001	\$15000	1%

### Final Working should be:

Example 1:

**Input:** \$589

**Output:** Your commission rate is 4% you will get \$23.56

and remaining amount is \$565.44

Example 2:

**Input:** \$12452

**Output:** Your commission rate is 1% you will get \$ 124.52

and remaining amount is \$1 2,327.48

## Algorithms:

• Put the data as <u>array object</u> or <u>array-of-arrays</u>.

#### **Problem 3:**

In the given string, find the number of times words are repeated .

Example 1:

**Input:** "virat sachin dhoni virat rahul virat rahul sachin"

**Output:** 

virat: 3 sachin: 2 dhoni: 1 rahul: 2

On examining any value will be inputted and tested accordingly.