

# Assignment -1

1. Write the program to input credits of a Campus leader and then output the badge of the lead on the basis of the following criteria:
  - a.  $7500 \leq \text{credits}$  : Tera leader
  - b.  $6000 \leq \text{credits} < 7500$  : Gega leader
  - c.  $4500 \leq \text{credits} < 6000$  : Mega leader
  - d.  $\text{Credits} < 4500$  : Rising Star
2. Write the pseudocode & a program to calculate the simple interest based on the inputs(amount, rate, time) provided by the user.
3. Write the pseudocode & the program to calculate GCD of two numbers.
4. Write a program to print even numbers after odd times jump.  
E.g: 2, 6, 14, 26, ...  
  
2 (then jump 1 even number 4) -> 6  
6 (then jump 3 even numbers 8, 10, 12) -> 14  
14 (then jump 5 even numbers 16,18,20,22,24) -> 26
5. Write a program to count the number of digits in a number.
6. Write a program to reverse a number (9735 -> 5379)
7. Write programs to print the following patterns for an input **n = 4**:

a. \*

```
  *
 * *
* * *
* * * *
```

b. 1

```
  1
 1 2
1 2 3
1 2 3 4
```

