# KARPAGAM COLLEGE OF ENGINEERING

## ADVANCED PYTHON PROGRAMMING

### REGULAR EXPRESSIONS
### LAB QUESTIONS

1. Write a python program to validate Register number of KCE student.

   Example 1:
   Welcome to KCE!
   Enter register number of student : 17T101
   Register number is valid.

   Example 2:
   Welcome to KCE!
   Enter register number of student : 17t101
   Register number is valid.

   Example 3:
   Welcome to KCE!
   Enter register number of student : N17101
   Register number is invalid.

2. Write a python program to extract maximum numeric value from an alphanumeric string.

   Examples:

   Enter String : 13sdf234f244sdf56
   Max value : 244

   Enter String: sdsd0dvgdf
   Max value: 0

3. Get string x from user.
   String x should not have space between different words
   and the first letter of every word is in uppercase.
   Create new string y from x.
   String y should have space between words.

Solve this problem using regex.

Examples:

Enter String x: RajaGoodInProgram
String y : Raja Good In Program

Enter String x :  KceTopCollegeInCoimbatore
String y :  Kce Top College In Coimbatore

4.  Write a python program for password validation.
    Password is a combination of alphanumeric characters along with special characters, and
    check whether the password is valid or not with the help of few conditions.
    Conditions for a valid password are:
    -   Should have at least one special symbol.
    -   Should have at least one uppercase one lowercase character.
    -   Should have at least one number.
    -   Should be between 5 to 15 characters long.
    Enter password :  Kce12#
    Valid password.

    Enter password :  zxc123
    Invalid Password

5.  Given an IP address, remove leading zeros from the IP address.

    Examples:
    Enter IP address: 100.020.003.400
    100.20.3.400

    Enter IP address: 001.200.001.004
    1.200.1.4

6.  Write a python program to check float number is in correct format.

    Enter float number : 2.03
    Correct format

    Enter float number : 2.0
    Correct format

    Enter float number : 2.
    Invalid format