

#### Assignment No. 4

1. Write a recursive python function to solve the problem of tower of Hanoi with three disks.
2. Write a python program to print the Pascal's triangle for n number of rows given by the user using both recursive and iterative procedures (for/while loop).
3. Input two integer values from user, calculate and print the quotient and remainder obtained from the two values,
  - a) Check whether it(function/values) is callable or not.
  - b) Check whether all the values are non zeros or not.
  - c) Add values (4, 5, 6) to the result and filter out the values which are greater than 4.
  - d) Convert the above result into set datatype.
  - e) Make that set immutable.
  - f) Evaluate the maximum value from set and find out its hash value.

*NOTE: Use built-in functions only*

4. Create a class named Student, use the `_init_()` function to assign values for name and roll number. And also call `_del_()` function to destroy object that is created.
5. Write a program to store details of three employees: name and salary using class.

Employee	Name	Salary
1	Mehak	40000
2	Ashok	50000
3	Viren	60000

- a) Update the salary of Mehak to 70000.
  - b) Delete the record of employee Viren.
6. Barbie and George are the two friends. On Saturday, they decided to travel to a fair where they discovered a fun game that put their friendship to the test. The test required George to utter a word and Barbie to create a new meaningful word using the exact same letters as George. If Barbie fails to form a word then their friendship is a fake.

Can you assist the shopkeeper by writing a piece of code for him to use so that the test runs smoothly?

*NOTE: Write the code only, no explanation or paper work required.*