# **YAY-Python Basics**

## **February 2021**

## **Assignment 1**

Deadline-Monday,22nd February 2021.

1. **Python Program to check Armstrong Number.**

Given a number x, determine whether the given number is Armstrong number or not. A positive integer of n digits is called an Armstrong number of order n (order is number of digits) if-

abcd... = pow(a,n) + pow(b,n) + pow(c,n) + pow(d,n) + ....

*Input : 153*

*Output : Yes*

*153 is an Armstrong number.*

*1\*1\*1 + 5\*5\*5 + 3\*3\*3 = 153*

1. **Python Program for Sum of squares of first n natural numbers.**

Given a positive integer N. The task is to find 12+22+32+..+n2.

1. **Python program to find Cumulative sum of a list.**

*Input : list = [10, 20, 30, 40, 50]*

*Output : [10, 30, 60, 100, 150]*

1. **Python Program to perform Binary Search.**
2. **Python Program to perform Bubble Sort.**