## Government Engineering College, Patan Computer Science and Engineering Department Python with Data science

## Set-1: Python Programming with Array, List

Set-1 : Python Programming with Array, List	
Prog-1	Python program to print all Prime numbers in an Interval.
Prog-2	Python Program for n-th Fibonacci number
Prog-3	Python Program for Sum of squares of first n natural numbers
Prog-4	Python Program for array rotation
Prog-5	Python Program to Split the array and add the first part to the end
Prog-6	Python Program to check if given array is Monotonic
	Input : 6 5 4 4
	Output : true
	Input : 5 15 20 10
	Output : false
Prog-7	Python program to find second largest number in a list
Prog-8	Python program to print even numbers in a list
	Example:
	<b>Input:</b> list1 = [2, 7, 5, 64, 14]
	<b>Output:</b> [2, 64, 14]
	I4. 1:-+2 - [12, 14, 05, 2]
	Input: list2 = [12, 14, 95, 3]
	Output: [12, 14]
Prog-9	Program to print duplicates from a list of integers
PTOG-9	1 rogram to print duplicates from a list of integers
	Examples:
	Input: list = $[10, 20, 30, 20, 20, 30, 40, 50, -20, 60, 60, -20, -20]$
	Output : output_list = [20, 30, -20, 60]
	Input : list = $[-1, 1, -1, 8]$
	Output : output_list = [-1]
Prog-10	Count occurrences of an element in a list
	Input : let = [15  6  7  10  12  20  10  20  10]
	Input: lst = [15, 6, 7, 10, 12, 20, 10, 28, 10] x = 10
	Output: 3
	10 appears three times in given list.
	Input: $1 \text{st} = [8, 6, 8, 10, 8, 20, 10, 8, 8]$
	x = 16
	Output: 0
Prog-11	Python program to find N largest elements from a list
	Input: [4, 5, 1, 2, 9]
	N=2
	Output: [9, 5]
	Input: [81, 52, 45, 10, 3, 2, 96]
	N=3
	Output: [81, 96, 52]