

## **Experiment - 3**

**Subject: Python**

**Branch: Computer**

**Semester: IV**

1.	Write a Python function to check whether a number is perfect or not. (Note : The first perfect number is 6, because 1, 2, and 3 are its proper positive divisors, and $1 + 2 + 3 = 6$ . Equivalently, the number 6 is equal to half the sum of all its positive divisors: $(1 + 2 + 3 + 6) / 2 = 6$ . The next perfect number is $28 = 1 + 2 + 4 + 7 + 14$ . This is followed by the perfect numbers 496 and 8128.)
2.	Write a Python function to check whether a string is a pangram or not. (Note : Pangrams are words or sentences containing every letter of the alphabet at least once. For example : "The quick brown fox jumps over the lazy dog")
3.	Python menu driven program to develop simple calculator using variable length argument
4.	Program to calculate factorial of a number using recursion
5.	Python program to calculate square and cube of a number and use two decorators, one to increase result by 4 and another to multiply result by 2.
6.	Write menu driven python program that accept list of numbers and performs following operation on list written in another module <ul style="list-style-type: none"><li>● Summation of all elements</li><li>● Product of all elements</li><li>● Summation of elements at even indices</li><li>● add elements in the list</li></ul>

Subject Incharge

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