**Ip practicals**

1)Write a Scratch program for (any one):

a) How to cross the river with fox, goose and corn

b) The sliding eight

c) sliding five

2) Write Python program for printing the patterns

3) Write Python program to check:

a) Whether the given number is odd or even

b) whether the given year is a leap year

4) Write Python program to convert:

a) character digit to integer

b) decimal number to binary or hexadecimal

5) Write Python program to check:

a) whether the given string is a palindrome or not

b) whether the given number is a prime number or not

6) Write Python program to find:

a) The nth Fibonacci number

b) Factorial of a given number

7) Write Python program to convert read a line of text and count

a) the number of letters

b) number of words

8) Write Python program to read a list of values and determines the quartiles

9) Write a Python function to check whether the list is sorted in one pass.

10) Write Python functions to encode and decode a message

11) Write a python function to find the sum of positive integers in a list

a) Iteratively

b) recursively

12) Write a function to implement:

a) binary search

b) tower of Hanoi