Exercise 3: Write a Python program to calculate the sum of the digits in an integer.

Exercise 4: update exercise 3 to check whether a given number is an Armstrong number or not.
A positive integer is called an Armstrong number if the sum of the cubes of individual digits of the number is equal to that number itself. For example, the sum of cubes of individual digits of the number 153 is 1* 1 * 1 + 5 * 5 * 5 + 3 * 3 * 3 = 153. Hence, the number 153 is called an Armstrong number.

Exercise 5: Write a python program that takes two integer values (start and end). This program will find all numbers (between start and end) which are divisible by 9 but are not divisible by 4.
The numbers obtained should be printed in a comma-separated sequence on a single line

Exercise 6: Write a python program for the factorial algorithm that you did in sheet2

Exercise 7: Write a Python program to calculate the power of two numbers. Don't use ** operator.

Exercise 8: Write a Python program to take from the user three integer numbers (x,y, z) and your program should search about an operations (e.g., +, -,*,%, etc) that can be executed on both x and y such that the result should be z, then you program would print x operations y = z
Input: Input:
2 3 8 10 5 15
Output: Output:
2**3 = 8 10+5 =15

Exercise 9:Given a word of five characters in lower case, write a flowchart and pseudo code to convert this word to upper case. Example: “apple” should be “APPLE.
Hint: To get the ascii code of character 'a' for example, use ascii('a') and to convert ascii code 97 for example back to character, use character(97)

Exercise 12: Write a Python program that will take a non-empty string and an int n, return a new string where the char at index n has been removed. The value of n will be a valid index of a char in the original string (i.e. n will be in the range 0..len(str)-1 inclusive)
Hint: Do not use loops, use string indexing, range, and concatenation

Exercise 13: Write a Python program that will take a string and check if it is palindrome or not.

Exercise 14: Write a python program to delete an element A[p] from an array segment A[m...n]. The specification is:
inputs: A - an array
m, n, p - positions in the array such that $m \leq p \leq n$
effects: The element A[p] is deleted from the array so that the sequence A[m…(n-1)] contain the original values of A[m…n] except for A[p].

Exercise 15: Write a Python function that accepts a string and calculate the number of digits and letters.
Sample Data: MyPython 3.117
Expected Output:
Letters 8
Digits 4

Exercise 16: Write an algorithm and draw a flowchart to print the SUM of numbers from LOW to HIGH. Test with LOW=3 and HIGH=9.(2) Write a Python program to implement this algorithm.

Exercise 17: Write a python function that takes an integer number (size) then it generates Fibonnaci sequence with the given size. (Hint: The Fibonnaci seqence is a