Assignment-41: lambda

- 1. Write a lambda expression to check if a number is even.
- 2. Write a lambda expression to find nth term of Fibonacci series
- 3. Write a lambda expression to calculate area of a circle.



- 4. Write a lambda expression to find HCF of two numbers.
- 5. Write a lambda expression to count words in a given text.

Assignment-42: Variable Length Arguments

- Write a function which receives variable length arguments to calculate average of integers. It returns the average of numbers.
- Write a function which receives variable length arguments to find greatest element.
 It returns the greatest element
- 3. Write a function which receives variable length arguments to filter odd and even numbers. Store all odd numbers in a list and all even numbers in another list. Store both the lists in a tuple and return.
- 4. Write a function which takes variable length arguments to receive strings. Return the list of max length string or strings if multiple strings have the same length.
- Write a function which takes variable length arguments to receive integers. Filter out Prime numbers and return a list of those Prime numbers.

Assignment-43: map, reduce and filter

- Write a python script to find number of vowels in each of the string in a given list of strings. Use map function.
- Write a python script to find number of digits in each of the element in a given tuple
 of numbers. Use map function.
- Write a python script to create a list of numbers greater than a given number N
 (taken from user) for each element in a given set of numbers. Use filter function.
- 4. Write a python script to filter only int type values in a given list of elements. Use filter function.
- Write a python function to calculate HCF (Highest Common Factor) of a list of numbers. Use reduce function.

Assignment-44: Decorator

- Write a function to calculate HCF of two numbers. Define a decorator for HCF function to tell whether the two numbers are co-prime or not.
- 2. Define a decorator to display "Happy New Year" message at the beginning.
- 3. Define a decorator to display "Good Bye" message at the end.
- 4. Write a function to check if a given number N is a Prime or not. Define a decorator to print total number of Prime numbers before N.
- 5. Write a function to check if the given sides of a triangle can form a valid triangle or not. Define a decorator to print "Right Angled Triangle" if the triangle is right angled triangle.