**Functional Programming**

1. Write a Python program to create Fibonacci series upto n using Lambda.
2. Write a Python program to find the numbers of a given string and store them in a list, display the numbers which are bigger than the length of the list in sorted form. Use lambda function to solve the problem.

Input :

Original string: SOC 23 CTech 5 DSBS8 NWC 56 CINtel 20 5

Output

Numbers in sorted form:

20 23 56

1. Write a Python program to sort a given list of strings(numbers) numerically using lambda.
2. Write a Python program to calculate the average value of the numbers in a given tuple of tuples using lambda.
3. Write a Python program to find the nested lists elements, which are present in another list using lambda.
4. Write a Python program to convert a given list of strings into list of lists using map function.
5. Write a Python program to convert all the characters in uppercase and lowercase and eliminate duplicate letters from a given sequence. Use map() function.
6. Write a Python program to add two given lists and find the difference between lists. Use map() function.
7. Write a Python program to add two given lists and find the difference between lists. Use map() function.
8. Filter the array, and return a new array with only the values equal to or above 18 ( consider filter function)
9. Write a Python program to filter only vowels from given sequence.

Input

sequence = ['g', 'e', 'e', 'j', 'k', 's', 'p', 'r']

Output :

e

e

1. Write a Python program to calculate sum of numbers from the list and maximum element from the list (use reduce function)
2. Write a python program to calculate factorial of given number ( use reduce function)

import functoolsdef mult(x,y):

print("x=",x," y=",y)

return x\*y

fact=functools.reduce(mult, range(1, 4))

print ('Factorial of 3: ', fact)

x= 1 y= 2

x= 2 y= 3

Factorial of 3: 6