## **Python**

## **Assignment Questions**

## Assignment

Q1. Create a python program to sort the given list of tuples based on integer value using a lambda function.

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Ans :-code:::: list.sort(key = lambda x: x[1])

print("Sorting the List of Tuples:")

print(list)

Q2. Write a Python Program to find the squares of all the numbers in the given list of integers using lambda and map functions.

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Ans: code::::-test1=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

test1=list(map(lambda x : x\*\*2 , test1))

Print (test1)

Q3. Write a python program to convert the given list of integers into a tuple of strings. Use map and lambda functions

Given String: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Expected output: ('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')

Ans :- code::::: Given String: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

tuple1=tuple(Given\_String)

str1=tuple(map(lambda x:str(x),tuple1))

str1

Expected\_output = str1

Expected output: ('1', '2', '3', '4', '5', '6', '7', '8', '9', '10')

Q4. Write a python program using reduce function to compute the product of a list containing numbers from 1 to 25.

Ans :- code::::: nums = range(1,25)

print(list(nums))

numbers = list(nums)

from functools import reduce

solution=reduce(lambda x,y: x+y,numbers)

**Solution** 

Q5. Write a python program to filter the numbers in a given list that are divisible by 2 and 3 using the filter function.

[2, 3, 6, 9, 27, 60, 90, 120, 55, 46]

Ans:-code::::: Given=[2, 3, 6, 9, 27, 60, 90, 120, 55, 46]

list(filter(lambda x : x%2 ==0,Given))

list(filter(lambda x : x%3 == 0, Given))

Q6. Write a python program to find palindromes in the given list of strings using lambda and filter function.

['python', 'php', 'aba', 'radar', 'level']

Ans :- palindromes Means a word, phrase, or sequence that reads the same backwards as forwards

Example: LEVEL

code::::: texts = ["python", "php", "aba", "radar", "level"]

palindromes = list(filter(lambda x: (x == "".join(reversed(x))), texts))

print(palindromes)

Note: Create your assignment in Jupyter notebook and upload it to GitHub & share that GitHub repository link through your dashboard.

