HOF Assignment - 2

Q1. Write a lambda function that computes the maximum element from two numbers.

Test Case 1:

Arguments: 4,5

Output: 5

Q2. Write a lambda function that computes the sum of two numbers. If the second number is not provided, use a default value of 10.

Test Case 1:

Argument: 5

Output: 15

Test Case 2:

Arguments: 5,6

Output: 11

Q3. Write a lambda function to check if the input is a list. If it's not a list, return "Invalid Input, otherwise return the length of that list.

Test Case 1:

Argument: [1, 2, 3, 4, 5]

Output: 5

Test Case 2:

Argument: ‘String’

Output: Invalid Input.

Q4. Write a lambda function that checks if a string is a palindrome, ignoring case sensitivity.

Note: Without using if-else concept.

Test Case 1:

Argument: ‘Racecar’

Output: True

Test Case 2:

Argument: ‘this’

Output: False.

Q5. Write a lambda function that checks if a number is a multiple of both 3 and 5. If true, return "Multiple of 3 and 5", otherwise return "Not a multiple"

Test Case 1:

Argument: 15

Output: "Multiple of 3 and 5"

Test Case 2:

Argument: 10

Output: "Not a multiple"

Q6. Write a python program to generate a lambda function to check whether a given string is a number or not. (True or False)

The output is:

Example of Expected Answer:

Is the given (3687) a number: True

Is the given (Python) a number: False

Q7. Create a higher order function which accept a lamda function and a list, then compute the sum of all the negative numbers of that list.

Note: Without using sum function.

Lst = [1, -2, 3, -4, -5]

Expected Output: -11

Q8. Write a Python program to reverse strings in a given list of string values using lambda.

Test Case:

Input: ['Red', 'Green', 'Blue', 'White', 'Black']

Output: ['deR', 'neerG', 'eulB', 'etihW', 'kcalB']

Q9. Write a Python program to square and cube every number in a given list of integers using Lambda.

Test Case:

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

Output:

[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]

[1, 8, 27, 64, 125, 216, 343, 512, 729, 1000]

Q10. Write a Python program to remove None values from a given list using the lambda function.

Test Case:

Input: [12, 0, None, 23, None, -55, 234, 89, None, 0, 6, -12]

Output: [12, 0, 23, -55, 234, 89, 0, 6, -12]

Q11. Use reduce function to find the sum of squares of the given list.

Lst = [1, 2, 3, 4].

Expected Output: 1172