VaultofCodes – Week 2 Assignment

Submitted by: A.Sangeetharasu

**Code 1:**

# 1. Write a program to count word frequencies in a given text

def count\_word\_frequency(text):

words = list(text.split(" "))

freq = {}

for word in words:

word = word.strip(";:'\"()[]{}.,?").lower()

if word:

if word in freq:

freq[word] += 1

else:

freq[word] = 1

return freq

inp = input("Enter the text here: ")

freq = count\_word\_frequency(inp)

print("The frequency of words are listed below:")

for key, val in sorted(freq.items(), key=lambda item : item[1], reverse=True):

print(key, "\t=> ", val)

# Enter the text here: This is a (sample) test case, to ; text this prog.

# The frequency of words are listed below:

# this => 2

# is => 1

# a => 1

# sample => 1

# test => 1

# case => 1

# to => 1

# text => 1

# prog => 1

**Code 2:**

# 2. Palindrome Checker

# Write a program that checks if a given word is a palindrome

def check\_palindrome(text):

if text == text[-1::-1]:

return True

else:

return False

inp = input("Enter the text here: ")

if check\_palindrome(inp.lower()):

print(f"\"{inp}\", is a palindrome.")

else:

print(f"\"{inp}\", is not a palindrome.")

# Enter the text here: asdfdsa

# "asdfdsa", is a palindrome.

# Enter the text here: palindrome

# "palindrome", is not a palindrome.

**Code 3:**

# 3. List Manipulation

# Create a list of numbers, then write a program that prints the square of each number in the list

def sq\_num\_list(nums):

print("The square values of each numbers are:")

for i in nums:

print(f"{i} ^ 2 = {i \*\* 2}")

print("Enter the list of numbers here (separate by space):")

nums = list(map(int, input().split(" ")))

sq\_num\_list(nums)

# Enter the list of numbers here (separate by space):

# 1 2 3 4 5 6 7 8 9 10

# The square values of each numbers are:

# 1 ^ 2 = 1

# 2 ^ 2 = 4

# 3 ^ 2 = 9

# 4 ^ 2 = 16

# 5 ^ 2 = 25

# 6 ^ 2 = 36

# 7 ^ 2 = 49

# 8 ^ 2 = 64

# 9 ^ 2 = 81

# 10 ^ 2 = 100