**Python Programming Internship(Week2)**

**Task 1:**

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

from collections import Counter

import re

def count\_word\_frequencies(text):

# Removes punctuations & whitespaces

text = re.sub(r'[^\w\s]', '', text)

#converts text into lowercase

text = text.lower()

# Split the text into words and count their frequencies

word\_list = text.split()

word\_frequencies = Counter(word\_list)

return word\_frequencies

if \_\_name\_\_ == "\_\_main\_\_":

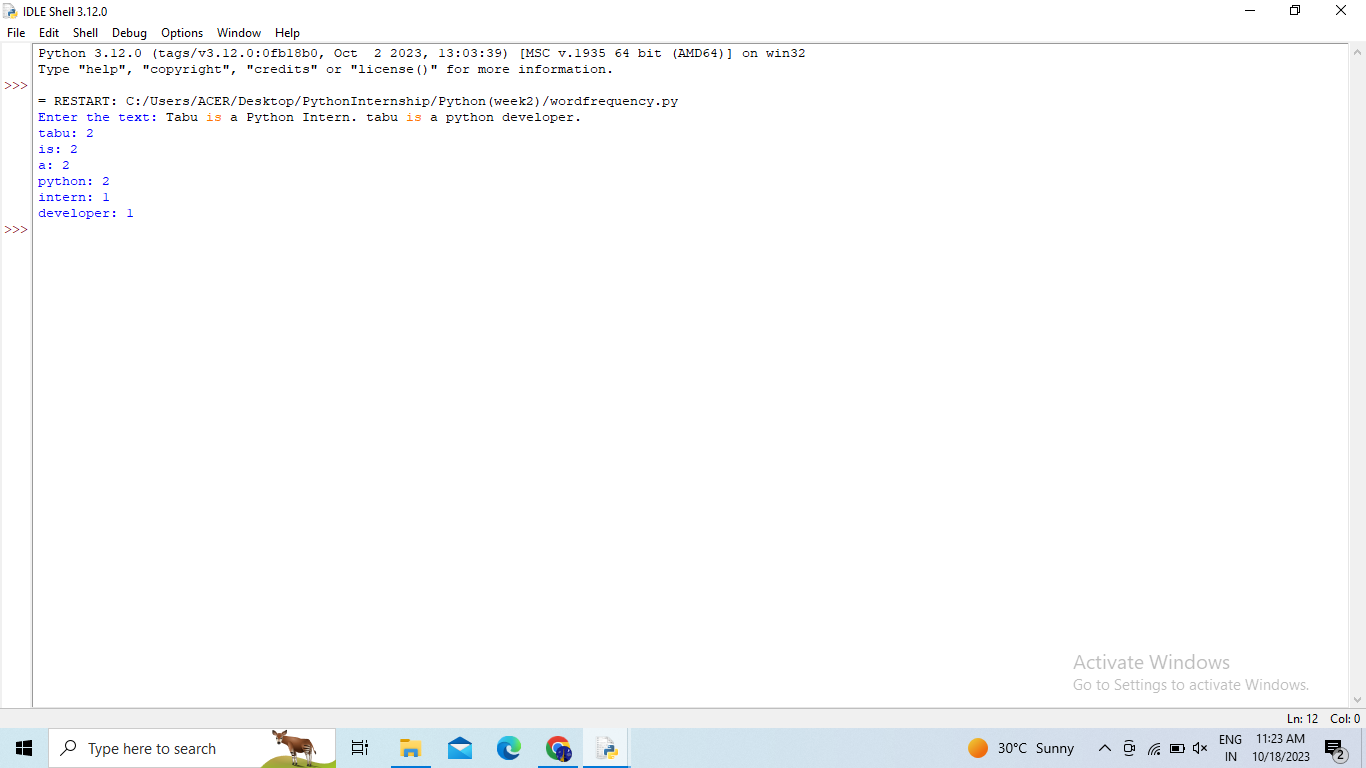
input\_text = input("Enter the text: ")

word\_frequencies = count\_word\_frequencies(input\_text)

# Print the word frequencies

for word, frequency in word\_frequencies.items():

print(f"{word}: {frequency}")

**Output:**

**Mini Project:**

Develop a basic to-do list program using functions and data structures add features like adding tasks in the to-do list, display the tasks and quitting the loop.

# Initialize an empty to-do list

todo\_list = []

# Function to add a task to the to-do list

def add\_task(task):

todo\_list.append(task)

print(f"Task '{task}' added to the to-do list.")

# Function to display the tasks in the to-do list

def display\_tasks():

if not todo\_list:

print("Your to-do list is empty.")

else:

print("Tasks in your to-do list:")

for index, task in enumerate(todo\_list, 1):

print(f"{index}. {task}")

#Function to remove the tasks in the to-do list

def remove\_tasks(todo\_list, task\_index):

if 1 <= task\_index <= len(todo\_list):

removed\_task = todo\_list.pop(task\_index - 1)

print(f"Task '{removed\_task}' removed from the to-do list.")

else:

print("Invalid task index. Please enter a valid index.")

# Main program loop

while True:

print("\nOptions:")

print("1. Add a task")

print("2. Display tasks")

print("3. remove tasks")

print("4. Quit")

choice = input("Enter your choice: ")

if choice == "1":

task = input("Enter the task: ")

add\_task(task)

elif choice == "2":

display\_tasks()

elif choice == "3":

task\_index = int(input("Enter the index of the task to remove: "))

remove\_tasks(todo\_list, task\_index)

elif choice == "4":

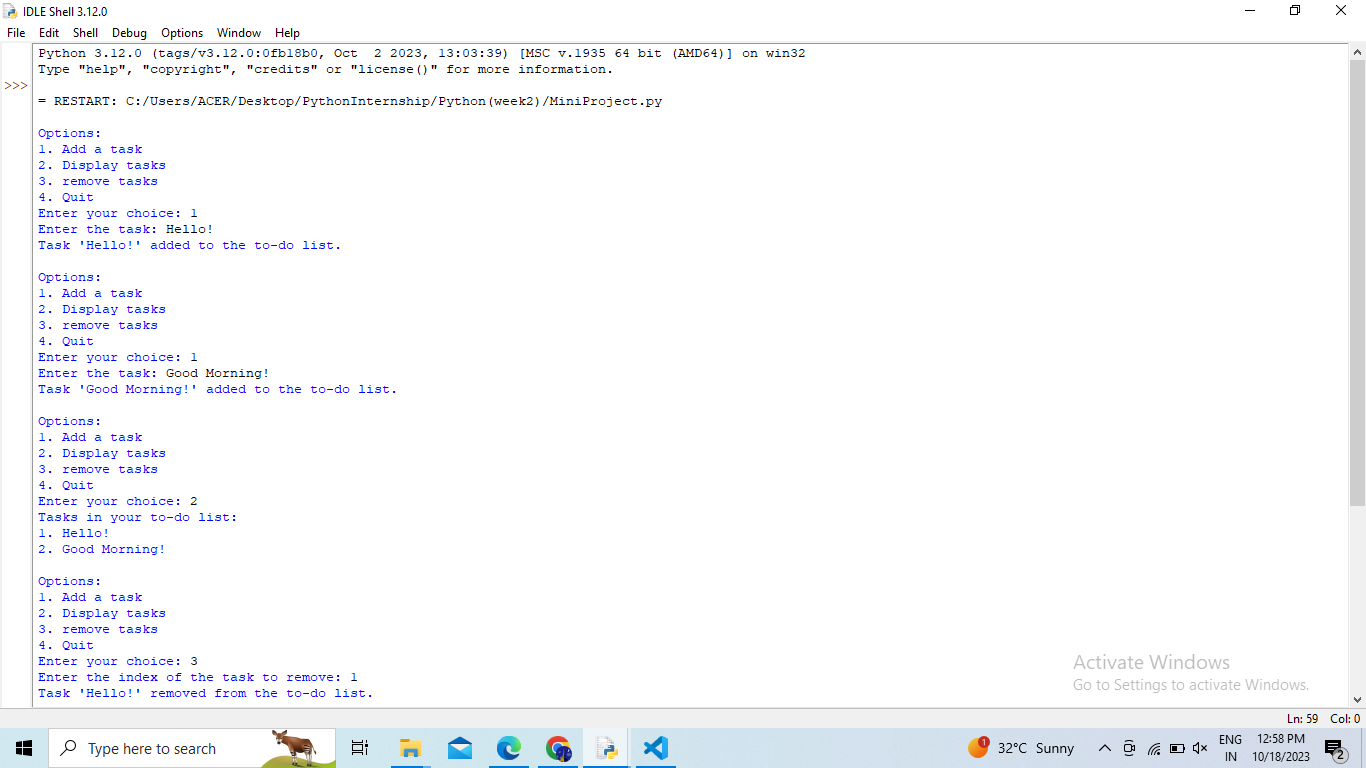
print("Goodbye!")

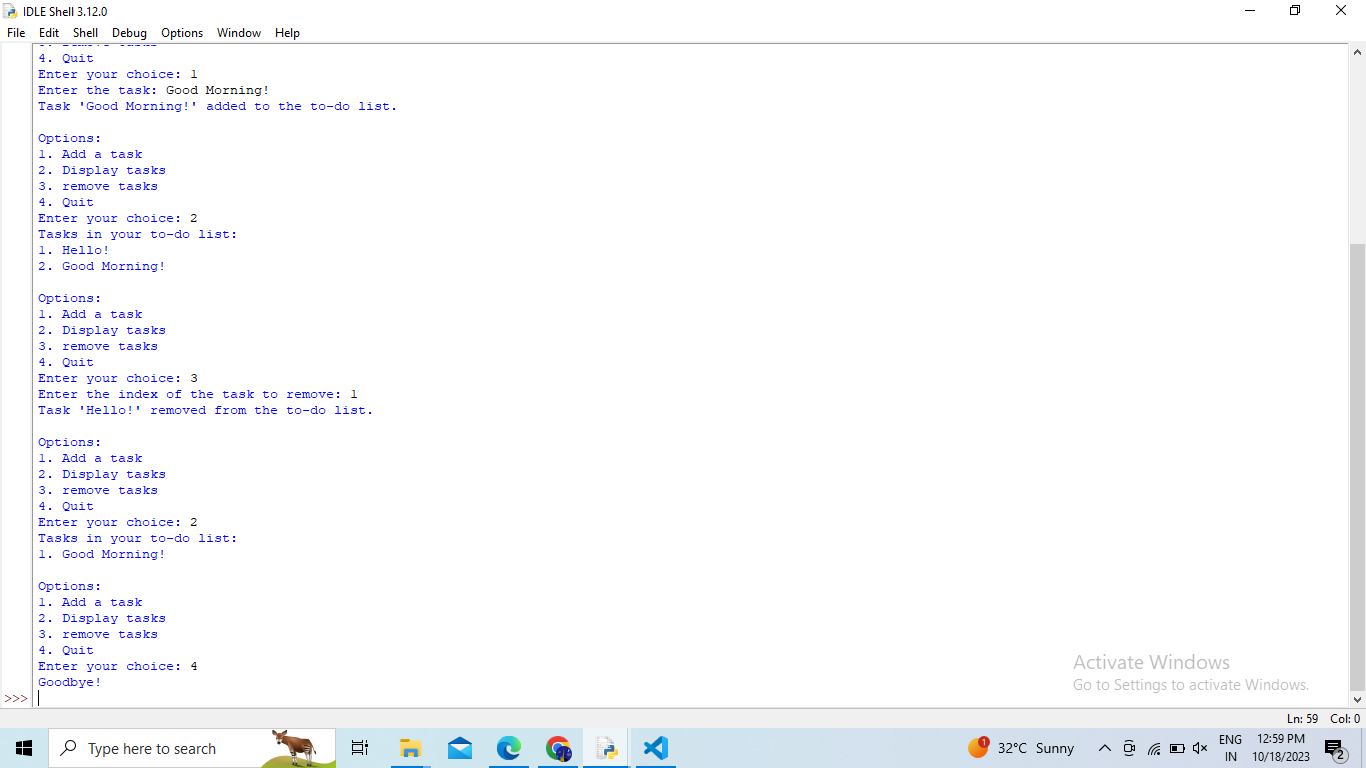
break

else:

print("Invalid choice. Please choose a valid option (1, 2, or 3).")

# The program will keep running until you choose to quit (option 4).

**Output:**

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