PYTHON INTERNSHIP

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

Code:

def count\_word\_frequencies(text):

word\_freq = {}

words = text.split()

for word in words:

word = word.lower() # Convert to lowercase to treat words case-insensitively

word = word.strip('.,!?()[]{}"\'') # Remove punctuation marks

if word.isalpha(): # Check if the word contains only alphabetic characters

if word in word\_freq:

word\_freq[word] += 1

else:

word\_freq[word] = 1

return word\_freq

if \_\_name\_\_ == '\_\_main\_\_':

input\_text = """

Python programming Internship at Vault Of Codes

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

"""

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

print("Word Frequencies:")

for word, freq in frequencies.items():

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

1. Mini Project: Develop a basic to-do list program using functions and data structures

Code:

# Function to display the to-do list

def display\_todo\_list(todo\_list):

print("To-Do List:")

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

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

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

def add\_task(todo\_list, new\_task):

todo\_list.append(new\_task)

print(f"Added: {new\_task}")

# Function to mark a task as complete

def mark\_complete(todo\_list, task\_index):

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

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

print(f"Completed: {completed\_task}")

else:

print("Invalid task index")

# Function to remove a task from the to-do list

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

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

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

print(f"Removed: {removed\_task}")

else:

print("Invalid task index")

# Main program loop

if \_\_name\_\_ == '\_\_main\_\_':

todo\_list = []

while True:

print("\nOptions:")

print("1. Display To-Do List")

print("2. Add Task")

print("3. Mark Task as Complete")

print("4. Remove Task")

print("5. Quit")

choice = input("Enter your choice (1/2/3/4/5): ")

if choice == "1":

display\_todo\_list(todo\_list)

elif choice == "2":

new\_task = input("Enter the new task: ")

add\_task(todo\_list, new\_task)

elif choice == "3":

task\_index = int(input("Enter the index of the task to mark as complete: "))

mark\_complete(todo\_list, task\_index)

elif choice == "4":

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

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

elif choice == "5":

break

else:

print("Invalid choice. Please try again.")