**Assignment**

**1. Read the entire content from a text file and display it**

**Question**

Write a program to read the entire content from a .txt file and display it to the user.

**Explanation**

You just need to open the file in read mode, read all its contents using read(), and print it.

**Python Code**

def read\_full\_file(filename):

try:

with open(filename, 'r') as file:

content = file.read()

print("File Content:\n", content)

except FileNotFoundError:

print("File not found.")

# Example usage

read\_full\_file("sample.txt")

**2. Read the first n lines from a text file**

**Question**

Write a program to read the first n lines from a .txt file. The value of n should be taken as input from the user.

**Explanation**

You can use readlines() to get all lines as a list, then print the first n using slicing.

**Python Code**

def read\_first\_n\_lines(filename, n):

try:

with open(filename, 'r') as file:

lines = file.readlines()

print(f"First {n} lines:")

for line in lines[:n]:

print(line, end='')

except FileNotFoundError:

print("File not found.")

# Example usage

n = int(input("Enter number of lines to read: "))

read\_first\_n\_lines("sample.txt", n)

**3. Accept user input and append it to a text file**

**Question**

Wrte a program to accept input from the user and append it to a text file.

**Explanation**

You open the file in append mode ('a') and write the user input at the end of the file.

**Python Code**

def append\_input\_to\_file(filename):

user\_input = input("Enter text to append: ")

with open(filename, 'a') as file:

file.write(user\_input + "\n")

print("Text appended successfully.")

# Example usage

append\_input\_to\_file("sample.txt")

**4. Read contents line by line and store each line into a list**

**Question**

Write a program to read contents from a .txt file line by line and store each line into a list.

**Explanation**

You can use readlines() or a for loop to store each line in a list.

**Python Code**

def file\_to\_list(filename):

try:

with open(filename, 'r') as file:

lines\_list = [line.strip() for line in file]

print("Lines as list:")

print(lines\_list)

except FileNotFoundError:

print("File not found.")

# Example usage

file\_to\_list("sample.txt")

**5. Find the longest word in the file**

**Question**

Write a program to find the **longest word** from the contents of a text file. Assume that there is only one longest word in the file.

**Explanation**

Read the file, split it into words, and then find the word with maximum length using max() with key=len.

**Python Code**

def find\_longest\_word(filename):

try:

with open(filename, 'r') as file:

words = file.read().split()

longest = max(words, key=len)

print("Longest word:", longest)

except FileNotFoundError:

print("File not found.")

# Example usage

find\_longest\_word("sample.txt")

**6. Count the frequency of a user-entered word in the file**

**Question**

Write a program to count the **frequency** of a word entered by the user in a text file.

**Explanation**

Read the file, split it into words, then count how many times the user word appears using .count().

**Python Code**

def count\_word\_frequency(filename):

word = input("Enter the word to count: ")

try:

with open(filename, 'r') as file:

content = file.read().split()

frequency = content.count(word)

print(f"The word '{word}' appears {frequency} times.")

except FileNotFoundError:

print("File not found.")

# Example usage

count\_word\_frequency("sample.txt")