**File Handling Questions**

1.Write a Python program to create a file and write multiple lines into it.

with open("example.txt", "w") as file:

   file.write("Line 1\n")

   file.write("Line 2\n")

   file.write("Line 3\n")

o/p:

Line 1

Line 2

Line 3

2. Write a program to read the first n lines of a file.

n=4

with open("example.txt",'r') as file:

   for i in range(n):

      print(file.read(),end=" ")

o/p:

hello this is python file-1

hello this is python file-2

3.Write a program to append content to an existing file without overwriting it.

with open("example.txt", 'a')as file:

   file.write("Append file\n")

o/p:

Line 1

Line 2

Append file

4.How do you check whether a file exists using the os module?

import os

if os.path.exists("example.txt"):

   print("File exists")

else:

   print("File does not exist")

o/p: File exists

5.Write a program to copy the contents of one file into another file.

with open("myfile.txt", "r") as sourcefile:

  with open("example.txt", "w") as destfile:

     for line in sourcefile:

        destfile.write(line)

o/p:hi my name is abhi

 6.Write a Python script to read a file and count:  
   - Total lines  
   - Total words  
   - Total characters

lines=words=chars=0

with open("myfile.txt","r")as file:

   for line in file:

       lines+=1

       words+=len(line.split())

       chars+=len(line)

print("Lines:", lines)

print("Words:", words)

print("Characters:", chars)

In myfile.txt

hi my name is abhi

this is file 1

this is file 2

o/p: is

Lines: 3

Words: 13

Characters: 49

7. Write a program to merge the contents of two text files into a third file.

with open("myfile.txt","w")as file1:

   file1.write("This is file 1\n")

with open("example.txt","w")as file2:

   file2.write("This is file 2\n")

with open("myfile.txt","r")as file1:

  with open("example.txt", "r") as file2:

     with open("merged.txt","w")as mf:

        mf.write(file1.read())

        mf.write(file2.read())

 In merged.txt

o/p:

This is file 1

This is file 2

8. Write a Python program to read a file and display only unique lines (remove duplicates).

with open("example.txt", "r") as file:

   unique = set() #set is used becz it does not allow duplicates

   for line in file:

       if line not in unique:

           print(line,end=" ")

           unique.add(line)

In example.txt file

hello everyone

hello everyone

good afternoon

hi abhi

o/p:

 hello everyone

 good afternoon

 hi abhi

 hello abhi

 9.Write a program that reads a file and prints only the lines that contain a specific keyword.

keyword = "hello"

with open("example.txt", "r") as file:

   for line in file:

       if keyword in line:

           print(line, end=" ")

o/p:hello students

 hello ma'am

 hello abhi

10.Write a program to read the last n lines of a file.

n = 2

with open("example.txt", "r") as file:

   lines = file.readlines()

   for line in lines[:-n]:

       print(line, end=" ")

o/p:

Hi

Hello

11.Write a program to count the frequency of each word in a file.

with open("word\_frequency\_counter.txt", 'w') as file:

   file.write("python is easy to learn. \n")

   file.write("learning python is fun and rewarding. \n")

   file.write("python is easy and powerful. \n")

word\_count = {}

with open("word\_frequency\_counter.txt", 'r') as file:

   for line in file:

       words = line.strip().split()

       for word in words:

           word = word.lower().strip('.,?!')

           word\_count[word] = word\_count.get(word, 0) + 1

print("word frequency in the file:")

for word, count in word\_count.items():

   print(f"{word}:{count}")

o/p:

word frequency in the file:

python:3

is:3

easy:2

to:1

learn:1

learning:1

fun:1

and:2

rewarding:1

powerful:1

12.Write a program to write a list of strings into a file, each string on a new line.

list=["red","green","blue","pink"]

with open ("colors.txt","w")as file:

  for item in list:

     file.write(item+ "\n")

o/p:

red

green

blue

pink