**10211CS213- Python Programming**

**Task 6:** Implement various text file operations in python

**6.1** Create a Python program to delete a specific line from a text file based on a given line number.

**Aim**

To develop a Python program that deletes a specific line from a text file based on the line number entered by the user.

**Algorithm**

1. Start
2. Define the file name (e.g., "example.txt").
3. Ask the user to enter the line number to delete.
4. Open the file in read mode and read all lines into a list using readlines().
5. Check if the entered line number is valid:
   * If 1 <= line\_number <= total\_lines, go to step 6.
   * Otherwise, ignore deletion.
6. Delete the line at position line\_number - 1 from the list.
7. Open the file in write mode and write the updated list back into the file.
8. Display a success messageto the user.
9. Stop

**Program**

file\_name = "example.txt" # your file

line\_number = int(input("Enter the line number to delete: "))

with open(file\_name, "r") as f:

lines = f.readlines()

if 1 <= line\_number <= len(lines):

del lines[line\_number - 1]

with open(file\_name, "w") as f:

f.writelines(lines)

print("Line deleted successfully")

**Output**

Example.txt

Apple

Banana

Mango

Orange

After running the program (3rd line removed):

Apple

Banana

Orange

Line deleted successfully

### 6.2 Dev playing a game with Prajith. Dev created some file. It contain some words and he asks to Prajith without seeing a file he want to Count Number of Words

Read a text file and count the number of words in it.

**Input:**

File name: data.txt

Welcome to pythonexamples.org. Here, you will find python programs for all general use cases.

**Output:**

Number of words in text file : 14

**Aim**

Write a program to count the number of words in the file

**Algorithm:**

Step 1 : Open python script file.

Step 2 : open data.txt file in read mode

Step 3: Read all contents of text file in a string data

Step 4: split the all the content in the data store into the words

Step 5: count the number of words using len()

**Program:**

file = open("d:\data.txt", "r")

data = file.read()

words = data.split()

print('Number of words in text file :', len(words))

**Input:**

File name: data.txt

Welcome to pythonexamples.org. Here, you will find python programs for all general use cases.

**Output:**

Number of words in text file : 14

# 6.3 Read and display the content of a given CSV file

Illustrate a python program it contain the CSV file name as students.csv . In this file its contain vtuno, name, year. Your task is to read and display the content of a student.csv file. Use csv.reader.

**Aim**

Write a program to display the content of a given CSV file

**Algorithm:**

Step 1 : Open python script file.

Step 2 : import csv ,open and read students.csv file using csv.reader()

Step 3: use for loop to read all contents

Step 4: print it

**Program:**

import csv

reader = csv.reader(open("d:\students.csv"))

for row in reader:

print(row)

**Input:**

File name: students.csv

vtuno name year

1234 aaaa 2

4567 bbbb 3

**Output:**

['vtuno name year']

['1234 aaaa 2']

['4567 bbbb 3']

6.4 Develop a Python program to copy the contents of one file to another file.

**Aim**

To develop a Python program that copies the contents of one text file into another file.

**Algorithm**

1. **Start** the program.
2. **Input** the source file name (the file to be copied).
3. **Input** the destination file name (the new file where content will be copied).
4. **Open** the source file in **read mode**.
5. **Open** the destination file in **write mode**.
6. **Read** the entire contents of the source file.
7. **Write** the contents into the destination file.
8. **Close** both files automatically (using with statement).
9. **Display** a success message that the contents have been copied.
10. **Stop** the program.

Program

source\_file = input("Enter the source file name: ")

destination\_file = input("Enter the destination file name: ")

with open(source\_file, "r") as src:

with open(destination\_file, "w") as dest:

content = src.read()

dest.write(content)

print(f"Contents of '{source\_file}' copied to '{destination\_file}' successfully!")

**Input and Output**

Enter the source file name: d:/data.txt

Enter the destination file name: d:/newdata.txt

Contents of 'd:/data.txt' copied to 'd:/newdata.txt' successfully!

**6.5 Library Management**

Question:  
A library keeps a file books.txt with book titles. Some titles are repeated. Write a program to create a new file with only unique book titles.

**Aim**

To develop a Python program that reads a list of books from a file, removes duplicate entries, and writes the unique book names into another file.

**Algorithm**

1. **Start**
2. Open the file books.txt in read mode.
3. Read all the lines from the file into a list.
4. Convert the list into a set to remove duplicate entries.
5. Close the input file.
6. Open a new file unique\_books.txt in write mode.
7. Write all the unique book names into this file.
8. Close the output file.
9. Display the message *“Unique book list created.”*
10. **Stop**

File: books.txt

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**Program**:

f = open("books.txt", "r")

books = set(f.readlines())

f.close()

f = open("unique\_books.txt", "w")

f.writelines(books)

f.close()

print("Unique book list created.")