File Handling

15-2-26

Aim – Demonstrate file handing in python.

Theory – File handling in Python allows programs to store and retrieve data permanently using files. It supports operations such as opening, reading, writing, and closing files. Functions like open(), read(), readlines(), and context managers (with) ensure efficient data processing and safe resource management.

A1.

```
file_name = "test.txt"

word_length = int(input("Enter desired word length: "))


file = open(file_name, 'r')

content = file.read()

file.close()


words = content.split()


print(f"Words with length {word_length}:")

for word in words:

    cleaned_word = ""

    for char in word:

        if char.isalpha():

            cleaned_word += char


    if len(cleaned_word) == word_length:

        print(cleaned_word)
```

```
C:\Users\tarun\Downloads\TSEC-SEM2-PYTHON\Assignment 4>python a1.py
Enter desired word length: 5
Words with length 5:
Delhi
```

A2.

```
with open('test.txt', 'r') as file:

    cities = file.readlines()

cities = [city.strip() for city in cities]
```

```
cities.sort()

for city in cities:

    print(city)
```

```
C:\Users\tarun\Downloads\TSEC-SEM2-PYTHON\Assignment 4>python a2.py
Ahmedabad
Bangalore
Chennai
Delhi
Hyderabad
Jaipur
Kolkata
Lucknow
Mumbai
Pune
```

Conclusion

File handling is essential for working with external data in Python programs. Using proper methods and context managers helps prevent data loss and memory leaks. It makes programs more reliable, organized, and suitable for real-world applications involving persistent data storage.