

10/9/25 Task: 6.1

## Implement various text file operation.

Aim: To write a Python program implement various text file operations.

Algorithm:

1. write to a file:

- Define writefile(filename) function
- > open a file named log.txt in write mode
- > write the following text to the file.
- > error objects are known when runtime error occurs.
- > close the file.

2. Read from a file:

- Define readfile(filename) function.
- > open the files specified by filename in read using a with Statement.
- > Read the entire content of the file
- > print the content.

3. Execute the program.

- Call writefile("write") to write the predefined text to "log.txt".
- Call readfile("text") to attempt to read from a file name "text" and print its content.



program:-

```
def writefile (file name):
```

```
    f = open ("log.txt", "w")
```

```
    f.write ("Error objects are thrown when  
runtime error occur. The error object  
can also be used as base object  
for user-defined exceptions")
```

```
    f.close()
```

```
def readfile (filename):
```

```
    with open (filename, "r") as file:
```

```
        content = file.read()
```

```
        print (content)
```

```
writefile ("write")
```

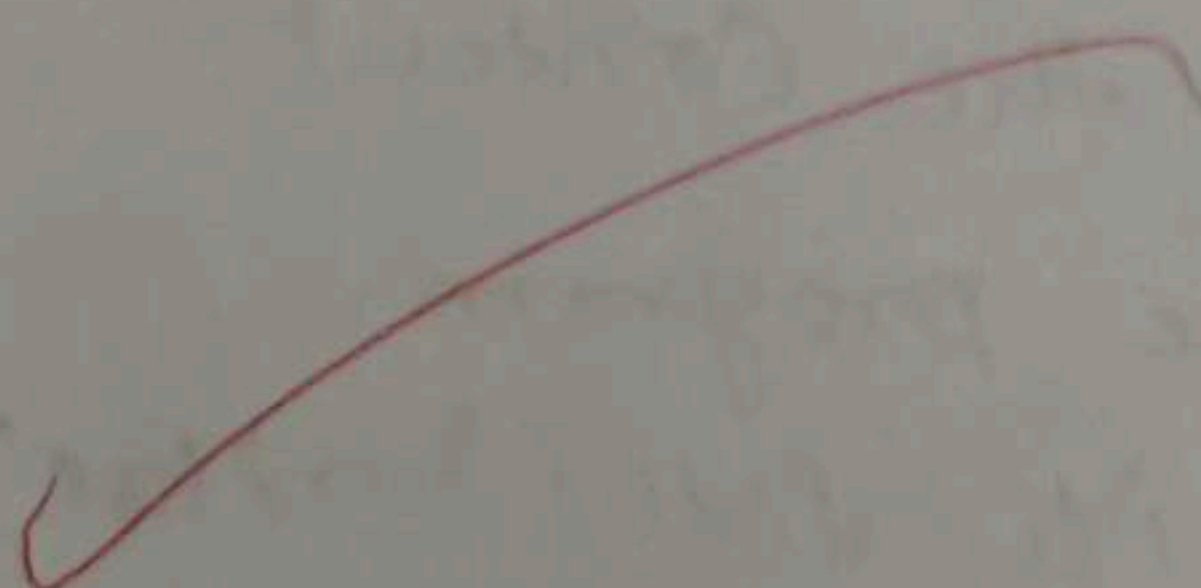
```
readfile ("text")
```





Output:

Error objects are thrown when runtime errors occur. The Error object can also be used as a base object for user-defined exceptions.





Aim: To write a python function that counts the number of lines containing the word 'Error' in a log file.

Algorithm:

1. Initialize Error Counter:

- Define the function count-error-lines
- Initialize error-count to 0.

2. Open and Read file:

- open the file specified by filename in read mode using a with statement.

3. Check each line for "ERROR".

- loop through line the file

→ If line contains the word "ERROR" increment by 1.

4. Return Error Count:

- After reading all the lines return the value of error-count.

5. Execute the program.

- Call count-error-lines ("log.txt") to count the number with the word "ERROR" in the file "log.txt".

- print the result with the message:

"Number of lines the 'ERROR': {error-lines}"



program:

```
def count-error-lines(filename):  
    error-count = 0
```

```
    with open(filename, "r") as file:  
        for line in file:
```

```
            if ERROR in line:
```

```
                error-count += 1
```

```
    return error-count
```


```
    error-lines = count-error-line("log.txt")
```

```
    print(f"Number of lines with ERROR: {error-  
        lines}").
```

log.txt

"Error objects are thrown when runtime  
Error  
occur."

the error object can also be used as  
base object for user defined exceptions.





Output:

RESTART: C:/Users/91979/Desktop/S125/6a.py

Number of lines with 'ERROR' is 2





10/9/25

## TASK: 6.3

Aim: to write python function that generates an employee report with names and departments and save it employee-report-txt.

### Algorithm:

1. Create Employee Data
  - Define the function write\_employee\_report
  - Create a list employee containing dictionaries each with 'name' and 'department' keys for individual employee.
2. open file for writing
  - open the file specified by filename in write mode using a with statement
3. write Employee Data to file
  - Loop through each employee in the employee list
  - For each employee format a string as Name
  - write the formatted string to the file followed by a newline character (\n)
4. ~~Execute~~ the program
  - Call write\_employee\_report("employee-report.txt") to write the employee data to the file "employee-report.txt".



Program:

```
def write-employee-report(filename):
```

```
    employees = (
```

```
        {"name": "Alicia", "department": "HR"},
```

```
        {"name": "Charlie", "department": "Engineering"},
```

```
        {"name": "Charlie", "department": "Finance"},
```

```
    )
```

```
    with open(filename, "w") as file
```

```
        for employee in employees:
```

```
            line = f'Name: {employee["name"]} Department
```

```
            {employee["department"]} \n'
```

```
            file.write(line)
```

```
# Example usage
```

```
write_employee_report("employee-report.txt")
```

VEL TECH COE	
SR NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	3
VIVA VOCE (3)	3
RECORD (4)	4
TOTAL (15)	
SIGN WITH DATE	15

Result: Thus the python program implemented various text file operation was successfully executed and the output was verified.



Output:

Name: Alice, Department: HR

Name: Bob, Department: Engineering

Name: Charlie, Department: Finance.