Task-6 Implement various text file operation

Aim:-

To write a python program implement various text file operations.

Problem 6.1:-

you need to write the sentence "Error objects are thrown when runtime errors occurs. The Error object can be used as a base object for user-defined, exceptions". into a text file named log.txt. Implement a function that performs this task.

Algorithm:-

1) write to a file:
Define writefile (filename) functions:
i) open a file named "log.txt" in write mode.
ii) write the following text to the file.
iii) "Error objects are thrown when runtime errors occur. The error object can also be used as a base object for user-defined exceptions".
iv) close the file.

2) Read from a file:
* Define readfile (filename) function:
i) open the file specified by filename in read mode using a with statement.
ii) Read the entire content of the file.
iii) Print the content.

3) Execute the program.

Output:-

Error objects are thrown when run time errors occur the Error objects can also be used as base object for user defined exception.

Program:-

```
def write file (file name):
    f = open ("log.txt", "w")
    f.write ("Error objects are thrown when runtime
    Errors occur. The Error object can also
    be used as a base object")
    f.close()
def read file (filename):
    with open (filename, "r") as file:
    Content = file.read()
    print (Content)
write file ("write")
read file ("txt")
```

Problem 6.2:- you have a txt file log.txt containing logs of a System. write a function that connects the no. of lines the word "ErroR".

Algorithm:-

1. Initialize Error Counter:
   * Define the func count-Error-lines (file-name):
   * Initialize Error.count to 0.
2. * Open and read file:
   * open the file by filename in read mode.
3. check Each line for "Error":-
   * Loop through each line in the file
   * If the line contains the word "Error", increment count by 1
4. Excute the program
   * Call count-Error-lines ("log.txt") to count the no. of lines with the word "Error" in the file "log.txt".

Output :-

no. of lines with 'Error' is 2

Program 6.2

```
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-lines ("log.txt")
printf ("no of lines with "Error" : {error-lines}")
```

Problem 6.3 :- you need to write a report containing the details (Name, dept) of the Employee in list write a python function that writes this report to a file named Employee-report.txt.

Algorithm :-

1.) Create Employee Data:
* Define the func write_Employee_report.
* Create a list of Employees containing dictionaries Each with "name" and "dept" keys.

2.) open file for writing.
* open file by file name in write mode using with statement.

3.) write Emp Data to file:
* Loop through each Employee in the Employees list.
* for each employee, formed a string as "Name : {Employee['name']}, {employee['dept']}".

4.) Execute the program
* Call write_Employee_report ("Employee_report.txt") to write the Employment data.

Output :-

Name : Alice, Dept : HR.
Name : Bob, Dept : Engineer.
Name : charlie, Dept : finance.

Program 6.3:-

```
def write_Employee_report (filename):
Employees = [
  {"name": Alice, "dept": "HR"},
  {"name": BOB, "dept": "Engineer"},
  {"name": Charlie, "dept": "Finance"}
  ]
with open (filename, "w") as file:
   for employee in Employees:
line = f"Name: {employee ['name']}, Dept:
  { Employee ['dept']} \n"
   file.write (line)
# Example
write_Employee_report ("Employee_report.txt")
```

Result:- Thus, the python program implement various text file operations was successfully excuted and the output was verified.

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