Problem 6.1:

You need to write the sentence "Error objects are thrown when runtime errors occur. The error object can also 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 write file (filename) function:
   -) Open a file named "log.txt" in write mode.
   -) Write the following text to the file
   -) close the file
2. Read from a file
   -) Define read file function.
   -) open the file specified by filename in read mode using a with statement
   -) print the content
3. Execute the program:
   -) call write file ("write") to write the predefined text to "log.txt".

Program 6.1

```
def write file (name):
    f = open ('log.txt', "w")
    f.write ("Error objects are thrown
    when run time errors occur The error
    object can also be used as a base
    object for user-defined exceptio-
    ns")
    f-close()
def readfile (filename):
    with open (filename, "r") as file:
    content = file.read()
    print (content)

write file ("write")
read file ("text")
```

output: Error objects are thrown when run
time errors occur. The Error object can al
be used as a base object for user-
defined exceptions.

Problem 62

You have a text file log.txt containing logs of a system. Write a function that counts the number of lines containing the word "Error".

Algorithm

1. Initialize Error Counter:
   - Define the function count_error_lines (file_name):
   - 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 each line in the file:
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 of lines with the word "ERROR" in the file
   - Print the result with the message "Number of lines with 'ERROR':

Numbers of lines with 'ERROR': 0

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")
print(f"Number of lines with 'ERROR': {error_lines}")
```

log.txt

"Error objects are thrown when run time error occur.

The Error object can also be used as a base object for user-defined exceptions."

problem 6 :

You need to write a report containing the details (Name, department) 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:
   a) Define the function write_employee_report (filename)
      b) create a list employee containing dictionaries, each with "name" and "department" keys for individual employees.
2. Open File for writing:
   a) Open the file specified by filename in write mode using a with statement
3. Write employee Data to File:
   a) Loop through each employee in the employee list
      i) For each employee, format a string as "name:
      ii) write the formatted string to the file, followed by a newline character (\n).
4. Execute the program
   a) call write_employee_report("employee_report.txt") to write the employee data to the file "employee_report.txt".

program 6.3:

```
def write_employee_report(filename):
    employees = [
        {"name": "Alice", "department": "HR"},
        {"name": "Bob", "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")
```

VELTECH	
EX No.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
SIGN WITH DATE	10/9

output:

Name: Alice, Department: HR

Name: Bob, Department: Engineering

Name: Charlie, Department: Finance