Q1. Write a Python program that takes a sentence as input and returns a dictionary where the keys are vowels and the values are the number of times each vowel appears in the sentence. Ignore case.

Example Input: "Education is important"
Expected Output: {'a': 2, 'e': 1, 'i': 2, 'o': 1, 'u': 1}

Q2. Write a function that checks if a given number is a palindrome. Then write another function that prints all palindrome numbers between two given numbers (inclusive).

Example Input: start = 100, end = 150
Expected Output: 101 111 121 131 141

Q3. Create a class Employee with attributes emp_id, name, and salary. Write methods to:

- **Display employee details**
- **Write the details to a file named employee_data.txt in CSV format**
- **Read from the file and display the content**

Q4. Create a class LogAnalyzer that reads a file called log.txt, counts the number of lines that contain the word "error" (case-insensitive), and prints the count. Include proper function(s) and file handling. Assume log.txt contains multiple lines.

Log.txt:

INFO: System initialized successfully

ERROR: Failed to connect to the database

WARNING: Deprecated function used

info: User logged in

error: Timeout while connecting to server

DEBUG: Memory usage is within limits

ERROR: Null pointer exception occurred

Warning: Battery level low

fatal: System crash detected

Error: File not found