**📝 Day 11 – Home Assignments: File Handling (Text Files – .txt)**

**🔹 Part A: Writing and Reading Text Files**

1. **Write a Greeting**
   * Create a file called greeting.txt
   * Write "Hello, welcome to Python file handling!" into it.
2. **Read File Content**
   * Open greeting.txt and print the content.
3. **Append More Text**
   * Append "This is the second line." to greeting.txt
   * Then read and print the updated content.

**🔹 Part B: Text File Operations**

1. **Write Multiple Lines**
   * Create a file bio.txt
   * Write the following lines (each on a new line):

Name: Ravi

Age: 22

Course: Python

1. **Read Line by Line**
   * Read and print each line from bio.txt using a loop.
2. **Count Words, Lines, Characters**
   * From a file sample.txt, print:
     + Total lines
     + Total words
     + Total characters

**🔹 Part C: File Handling Modes Practice**

1. **Using 'r' Mode**
   * Try to read a file that doesn't exist using 'r'.
   * What error is shown?
2. **Using 'w' Mode**
   * Open a file with 'w' mode and write some content.
   * Then open it again with 'r' and print it.
   * Notice: Does previous data persist?
3. **Using 'a' Mode**
   * Use 'a' mode to keep adding new lines to a file every time the program runs.

**🔹 Part D: Real-World File Use Tasks**

1. **Save User Input**
   * Ask user for their name and a short bio
   * Save it to a file user\_profile.txt
2. **Store Even Numbers**
   * Write a program to find even numbers from 1–50
   * Save them line-by-line into even\_numbers.txt
3. **Reverse File Content**
   * Read lines from sample.txt
   * Reverse each line and write it to reversed.txt
4. **Word Replacer**
   * From a file story.txt, replace the word "sad" with "happy"
   * Save the result to a new file updated\_story.txt
5. **Merge Two Files**
   * Read from file1.txt and file2.txt
   * Merge their contents and write to merged.txt
6. **Email Extractor**
   * From a text file containing a paragraph, extract all words containing '@' and save them as a list of emails to emails.txt