

8.3 File handling

Name: _____ Class: _____ Date: _____ Total: 9 marks

KEY WORDS file 文件 • file handling 文件处理 • variable 变量 • array 数组 • constant 常量

Objective

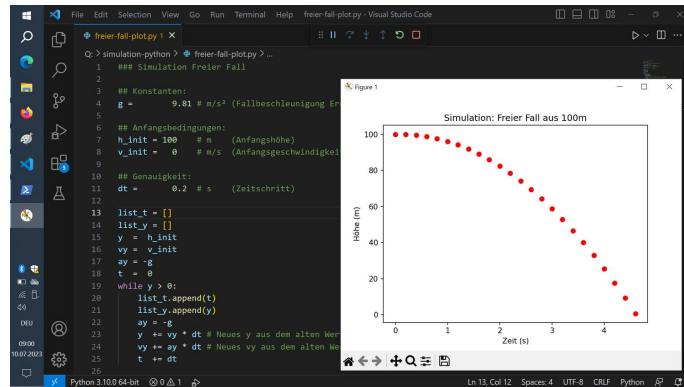
Build the skills to answer exam questions on **file handling** 文件处理 — storing data in a **file** 文件 so it is kept after the program stops, and the **open** → **use** → **close** pattern for reading and writing.

You must be able to:

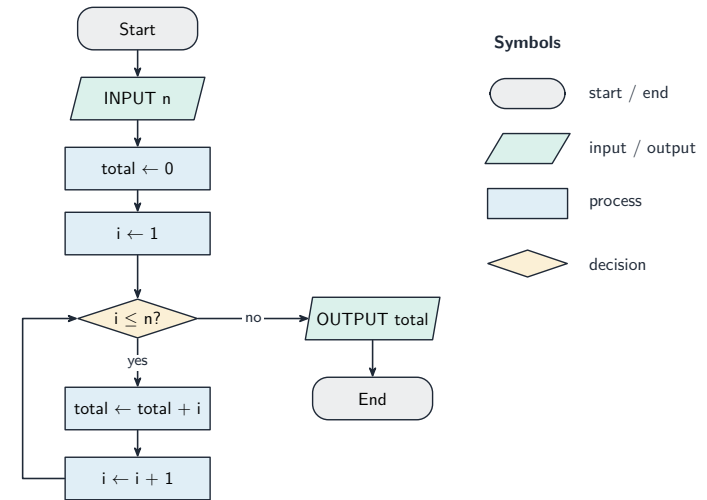
- explain why a program uses a file to store data
- write pseudocode to **open, write, read and close** a file
- describe the difference between writing to and reading from a file

1 Worked examples

■ Open, use, close



Data written to a file is kept after the program stops, unlike a variable in memory



File handling follows an *open - read/write - close* sequence

Write then read back one line:

- `OPENFILE "data.txt" FOR WRITE → WRITEFILE "data.txt", "Hello" → CLOSEFILE "data.txt"`
- `OPENFILE "data.txt" FOR READ → READFILE "data.txt", line → CLOSEFILE "data.txt"`

Always **close** a file when finished.

2 Practice

2.1 State one reason a program stores data in a file rather than in a variable. [1]

2.2 State the three steps used to handle a file, in order. [3]

3 Exam-style questions

3.1 A program must keep its data after it stops running. The data should be stored: [1]

- | | |
|---|---|
| A | B |
| C | D |
- A in a variable
 - B in a constant
 - C in a file
 - D in an array

3.2 A program writes a player's name to a file, then later reads it back.

(a) Write pseudocode to open `scores.txt`, write the name in variable `playerName` to it, and close it. [3]

(b) State what could go wrong if the file is **not** closed after writing. [1]
