

4.6 Using Text Files

Name: _____ Class: _____ Date: _____

Total: 8 marks

KEY WORDS text file 文本文件 • scanner 扫描器

Objective

Build the skills to answer exam questions on **using text files**.

You must be able to:

- use the **Scanner** 扫描器 class to read data from a **text file** 文本文件
- open a file with a **File** object and read it line by line
- use methods such as `hasNextLine`, `nextLine`, and `nextInt`

1 Worked examples

Study these first. Each one shows the method for a question type used later.

■ Reading a file with a Scanner

```
Scanner in = new Scanner(new File("data.txt"));
while (in.hasNextLine()) {
    String line = in.nextLine();
}
```

■ Useful methods

- `hasNextLine()` — `true` while there is another line to read.
- `nextLine()` — reads and returns the next line.
- `nextInt()` — reads the next integer.

2 Practice

2.1 Name the class commonly used to read a text file. [1]

2.2 State what `hasNextLine()` returns. [1]

2.3 Name a method that reads one line of a file. [1]

3 Exam-style questions

3.1 To read a text file line by line, you loop while [1]

- **A** `hasNextLine()`
 - **B** `nextLine()`
 - **C** `length`
 - **D** `size()`
-

3.2 `nextInt()` reads [1]

- **A** a whole line
 - **B** the next integer
 - **C** an entire file
 - **D** a boolean
-

3.3 A program reads numbers from a file.

(a) Name the class used. [1]

(b) Name a method that checks whether there is more input. [1]

(c) Name a method that reads the next integer. [1]

Solutions

2.1 `Scanner`.

2.2 `true` if there is another line to read, otherwise `false`.

2.3 `nextLine()`.

3.1 A.

3.2 B.

3.3 (a) `Scanner`. (b) `hasNextLine()` (or `hasNextInt()`). (c) `nextInt()`.