

Exercise walk-through

Using Text Files ■ 4.6

eXercise

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`

Method — Reading a file with a Scanner

```
nScanner+w nin+w o+=w knew+w nScannerp(knew+w nFilep(err"ndatap.n+natxtterr
kwhile+w p(ninp.n+nahasNextLinep(p)p)+w p
+w      nString+w nline+w o+=w ninp.n+nanextLinep(p)p;
p
```

Method — Useful methods

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

Practice 2.1 ■ 1 mark

Name the class commonly used to read a text file.

Solution 2.1

Worked steps

Scanner **B1**.

Practice 2.2 ■ 1 mark

State what `hasNextLine()` returns.

Solution 2.2

Method: Useful methods

Worked steps

true if there is another line to read, otherwise false **B1**.

Practice 2.3 ■ 1 mark

Name a method that reads one line of a file.

Solution 2.3

Worked steps

```
nextLine() B1.
```

Exam-style 3.1 ■ 1 mark

To read a text file line by line, you loop while

A `hasNextLine()`

B `nextLine()`

C `length`

D `size()`

Solution 3.1

A `hasNextLine()`



B `nextLine()`

C `length`

D `size()`

Worked steps

A.

Exam-style 3.2 ■ 1 mark

`nextInt()` reads

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

Solution 3.2

Method: Useful methods

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

Worked steps

B.

Exam-style 3.3 ■ 1 mark

A program reads numbers from a file.

- (a) Name the class used.
- (b) Name a method that checks whether there is more input.
- (c) Name a method that reads the next integer.

Solution 3.3

Method: Useful methods

Worked steps

(a) Scanner **B1**. (b) `hasNextLine()` (or `hasNextInt()`) **B1**. (c) `nextInt()` **B1**.