

Solutions

Each answer shows the steps, then the **result**.

2.1

- a variable is lost when the program stops
- a file **keeps the data after the program stops** (non-volatile)

2.2

- three steps, in order
- **open, read or write, close**

2.3 B

- WRITEFILE stores data; the file name comes **first**, then the variable

3.1 C

- data that must survive after the program stops is stored **in a file**
- A, B and D live in RAM and are lost when the program ends

3.2

(a)

- open for writing; write the name; close

```
OPENFILE "scores.txt" FOR WRITE
WRITEFILE "scores.txt", PlayerName
CLOSEFILE "scores.txt"
```

(b)

- the data may **not be saved**, or the file may be left **locked or corrupted**

3.3

```
DECLARE StudentAttendance : STRING
OPENFILE "Attendance.txt" FOR READ
READFILE "Attendance.txt", StudentAttendance
CLOSEFILE "Attendance.txt"
```

- declares StudentAttendance as a STRING
- opens the file **for read**
- reads a line **into** StudentAttendance
- closes the file

3.4

```
OPENFILE "Note.txt" FOR WRITE
WRITEFILE "Note.txt", Message
CLOSEFILE "Note.txt"
OPENFILE "Note.txt" FOR READ
READFILE "Note.txt", Check
CLOSEFILE "Note.txt"
OUTPUT Check
```

- opens Note.txt **for write**
- writes Message to the file
- closes the file before opening it again
- opens it **for read** and reads the line into Check
- closes the file and outputs Check