

6-A-Day – Computer Science GCSE (p2.4-2016)

Q1

Heath is researching how long, to the nearest minute, each student in his class spends playing computer games in one week (Monday to Friday). He is storing the data in a 2D array.

Fig. 2 shows part of the array, with 4 students.

Fig. 2
Students

	0	1	2	3
0	60	30	45	0
1	180	60	0	60
2	200	30	0	20
3	60	10	15	15
4	100	35	30	45

For example, student 1, on Monday (day 0), played 30 minutes of computer games.

(b) (i) Identify a data type that could be used to store the number of minutes in this array.

.....

[1]

Q2

(ii) State why this data type is the most appropriate.

.....

[1]

Q3

(c) Heath wants to output the number of minutes student 3 played computer games on Wednesday (day 2). He writes the code:

```
print (hoursPlayed[3,2])
```

The output is 20.

(i) Write the code to output the number of minutes student 0 played computer games on Wednesday.

.....
.....

[1]

Q4

(ii) State the output if Heath runs the code:

```
print (hoursPlayed[2,1])
```

.....

[1]

The questions on this worksheet have been taken from the OCR GCSE Computer Science Specimen Paper 2

Q5	<p>(iii) State the output if Heath runs the code:</p> <pre>print (hoursPlayed[3,1] + hoursPlayed[3,2])</pre> <p>.....</p> <p>[1]</p>
Q6	<p>(iv) Write an algorithm to output the total number of minutes student 0 played computer games from Monday (day 0) to Friday (day 4).</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>[3]</p>