

4 An algorithm has been written in pseudocode to allow the names of 50 cities and their countries to be entered and stored in a two-dimensional (2D) array. The contents of the array are then output.

```
01 DECLARE City ARRAY[1:50, 1:2] OF BOOLEAN
02 DECLARE Count : INTEGER
03 DECLARE Out : INTEGER
04 Count ← 1
05 IF
06     OUTPUT "Enter the name of the city"
07     INPUT City[Count, 2]
08     OUTPUT "Enter the name of the country"
09     INPUT City[Count, 2]
10     Count ← Count + 1
11 UNTIL Count = 50
12 FOR Out ← 1 TO 1
13     OUTPUT "The city ", City[Out, 1], " is in ", City[Out, 2]
14 NEXT Out
```

(a) Identify the **four** errors in the pseudocode and suggest corrections.

Error 1

Correction

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Error 2

Correction

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Error 3

Correction

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Error 4

Correction

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[4]

(b) Describe the changes you should make to the corrected algorithm to allow the name of a country to be input and to display only the stored cities from that country.

You do **not** need to rewrite the algorithm.

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