

- 9 The program in a vending machine uses an array called Coins to store the value in pence of all the coins that have been entered in the current sale.

A maximum of 10 coins can be entered in each sale.

After each sale, the array is reset so that all values are 0.

- (a) Here is an example of the contents of the array Coins during a sale.

10	100	20	50	5	0	0	0	0	0
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In the example above, the value of Coins(1) is 10.

State the value of

Coins(4)

Coins(10) [2]

- (b) An algorithm to reset the contents of the array Coins after each sale is shown below. This algorithm contains a logic error.

```
i = 1
REPEAT
    Coins(i) = 0
    i = i + 1
UNTIL i = 10
```

- (i) State what is meant by a logic error.

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..... [1]

- (ii) Explain why the algorithm above contains a logic error.

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..... [2]

