

007 An algorithm a day...

Algorithm Question

Source: OCR GCSE Computing Exam Jan 2013

In a factory, the wages earned by a worker is either £2 for every teddy bear they have made or £5 for every hour they have worked, whichever is higher.

Write an algorithm in pseudocode which:

- Allows the user to input the number of teddy bears made and the number of hours worked
- Calculates the wages for the number of teddy bears made
- Calculates the wages for the number of hours worked
- Outputs the larger of the two results.

[6 marks]

Algorithm Example Answer

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*****There are always different ways to solve a problem. This algorithm is just an example. What is important is that the logic is correct!*****

LOGIC:

- **Inputting teddy bears and hours**
- **2 * number of teddy bears**
- **5 * hours**
- **Comparing the two answers**
- **Outputting the piece rate if it is greater**
- **Outputting the hour rate if it is greater.**

EXAMPLE ALGORITHM:

```
INPUT TeddyBears
INPUT Hours
PerTeddyBear = 2 * TeddyBears
PerHour = 5 * Hours
IF PerTeddyBear > PerHour THEN
    OUTPUT PerTeddyBear
ELSE
    OUTPUT PerHour
END IF
```