## Algorithm Question

A taxi firm charges £3 for the first mile and £2 for every mile after that. If there are 5 or more passengers, an extra 50% is added to the price.

Write an algorithm in pseudocode which calculates the cost of a journey. The algorithm should:

- Ask the user to enter the number of passengers
- Ask the user to enter the distance (as an integer)
- Calculate the price of the journey
- Output the price on the screen

[7 marks]
Write an algorithm in pseudocode which:

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<th>Algorithm Example Answer</th>
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<tr>
<td>Write an algorithm in pseudocode which:</td>
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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:**
- Inputs distance and passengers
- Calculates distance – 1 (or equivalent)
- Calculates previous answer * 2 (or equivalent)
- Calculates previous answer + 3
- Checks if more than 4 passengers...
- ... and adds 50% correctly
- Outputs cost

**EXAMPLE ALGORITHM:**

```
INPUT Distance
INPUT Passengers
Extra = Distance - 1
CostofExtra = Extra * 2
Cost = 3 + CostofExtra
IF Passengers > 4 THEN
    Surcharge = Cost / 2
    Cost = Cost + Surcharge
END IF
OUTPUT COST
```