Questions: Summative assessment

### Instructions

The next 20 questions will test your understanding of everything that you have covered over the Year 7 programming units.

* For A, B, C, D answers — **CIRCLE** the correct answer
* If you change your mind about an answer, put a cross through it and circle another letter
* For answers that require a written response, write in the answer box provided

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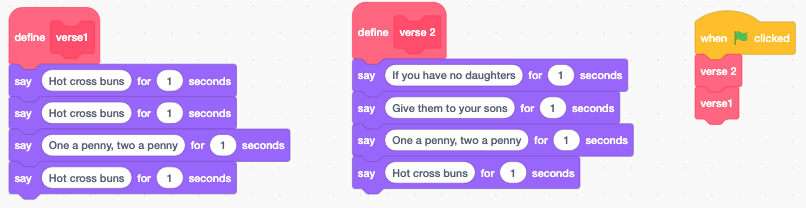
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### Sequencing

Q1. Which one of the following segments of code would be the most precise block to use to draw a blue square in Scratch?

|  |  |  |  |
| --- | --- | --- | --- |
| A |  | B |  |
| C |  | D |  |

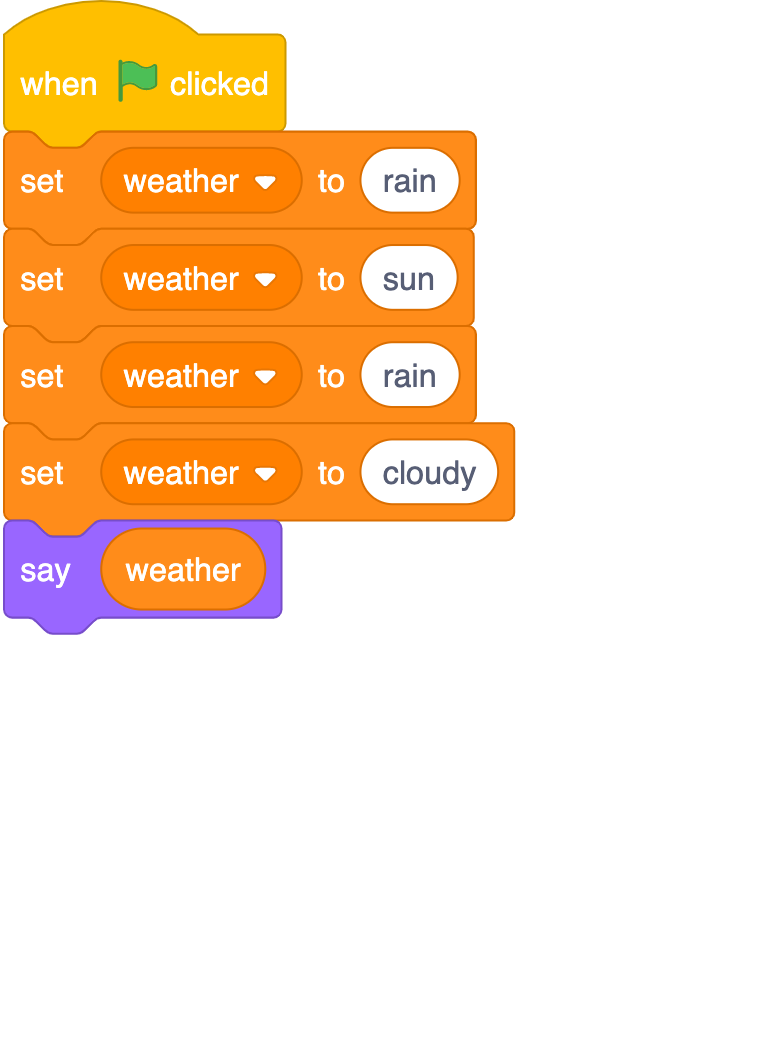
Q2. Would the following program correctly play the nursery rhyme, *Hot Cross Buns*?



|  |  |
| --- | --- |
| **Answer** |  |

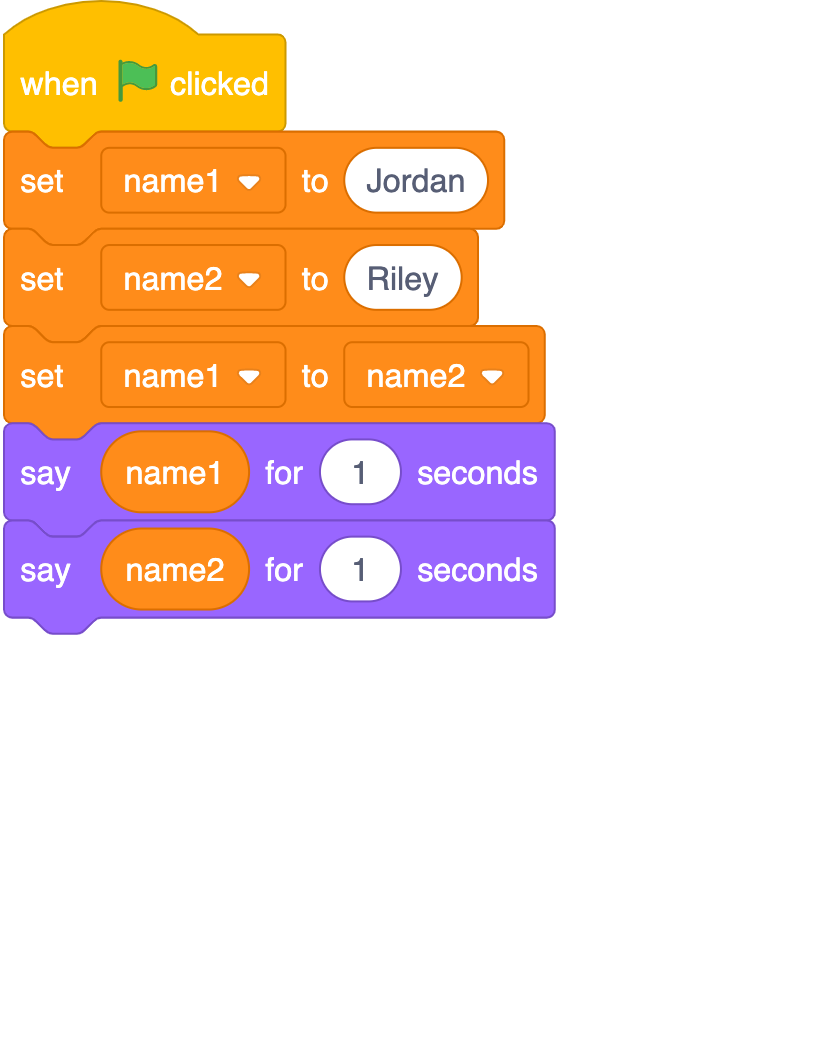
### Variables

Q3. What would the output of **Say** ‘weather’ be at the end of this program?



|  |  |  |
| --- | --- | --- |
| A | rain |  |
| B | cloudy |  |
| C | rain, sun, rain, cloudy |  |
| D | weather |  |

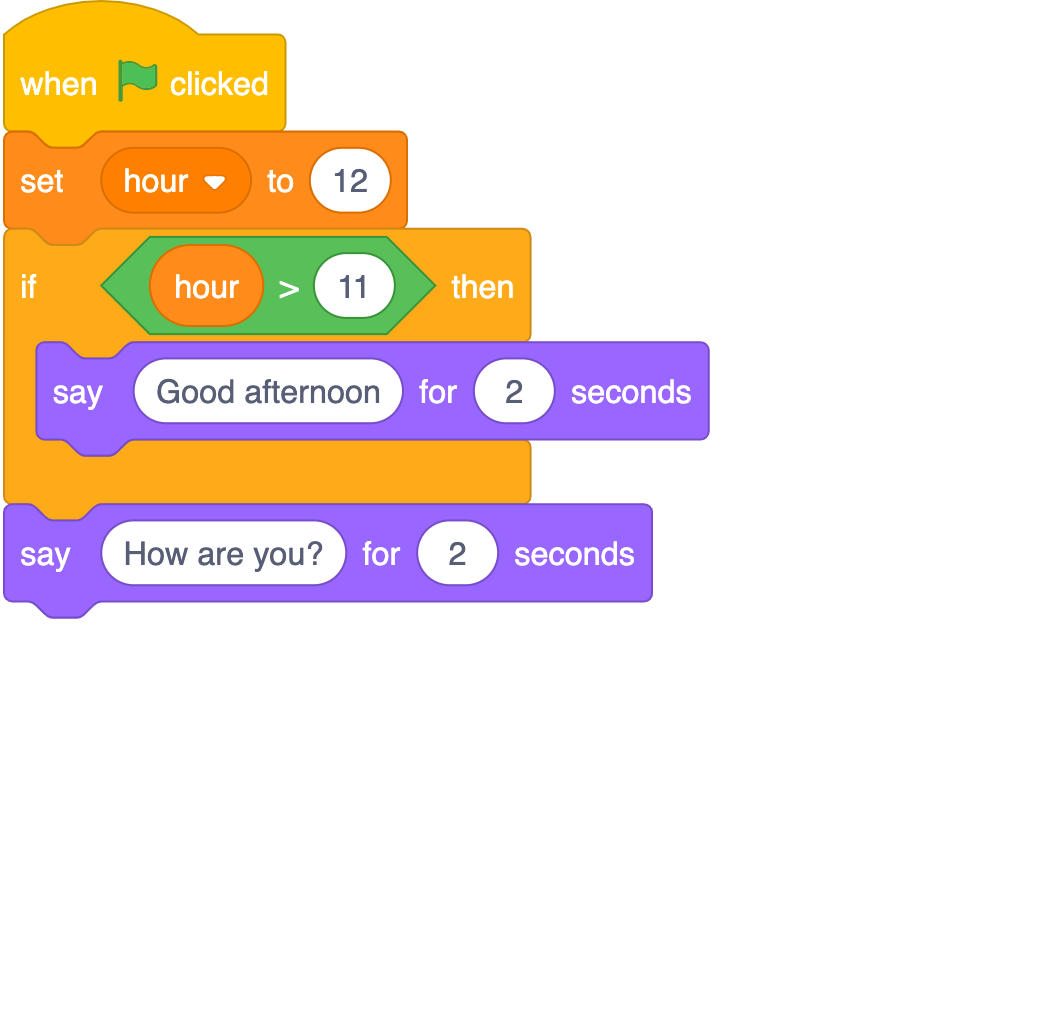
Q4. What value would be held by the ‘name1’ variable and the ‘name2’ variable at the end of this program?



|  |  |  |
| --- | --- | --- |
| A | name1 = Jordan , name2 = Riley |  |
| B | name1 = Riley, name2 = Jordan |  |
| C | name1 = Jordan, name2 = Jordan |  |
| D | name1 = Riley, name2 = Riley |  |

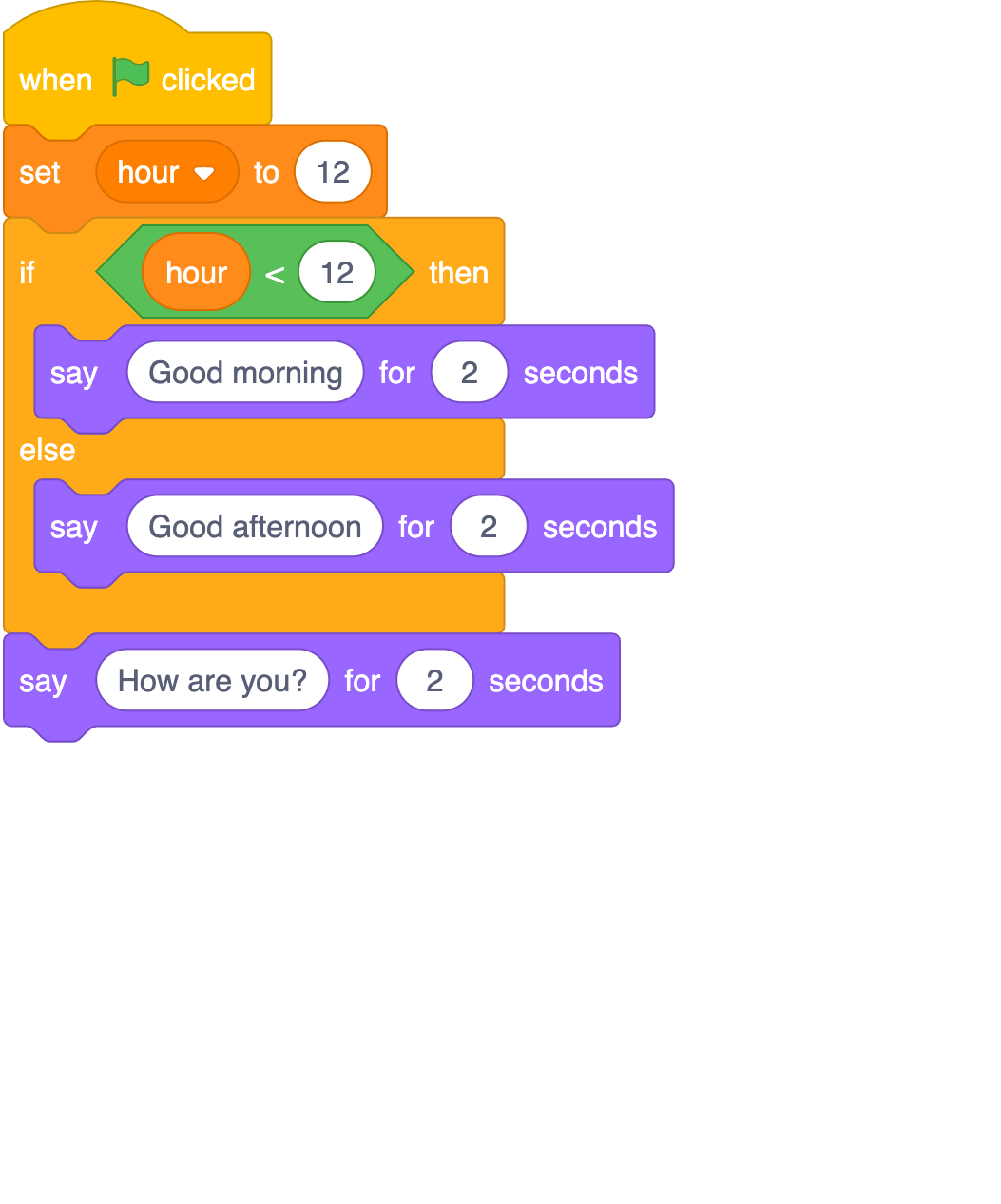
### Selection, conditions, and operators

Q5. What will be the output of this program when it is executed? (What will the sprite say)?



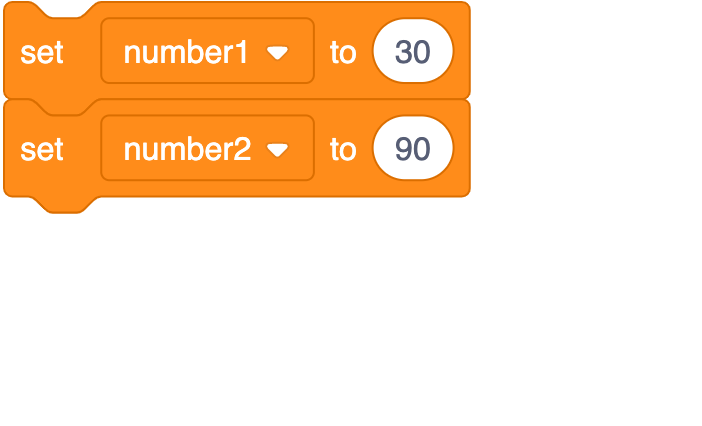
|  |  |  |
| --- | --- | --- |
| A | Good afternoon |  |
| B | How are you? |  |
| C | Good afternoon  How are you? |  |
| D | Nothing will be outputted/said |  |

Q6. What will be the output of this program when it is executed? (What will the sprite say)?



|  |  |  |
| --- | --- | --- |
| A | Good afternoon  How are you? |  |
| B | How are you? |  |
| C | Good morning  Good afternoon  How are you? |  |
| D | Good morning  How are you? |  |

Q7. Which of the conditions would evaluate to ‘true’ with the following inputs?



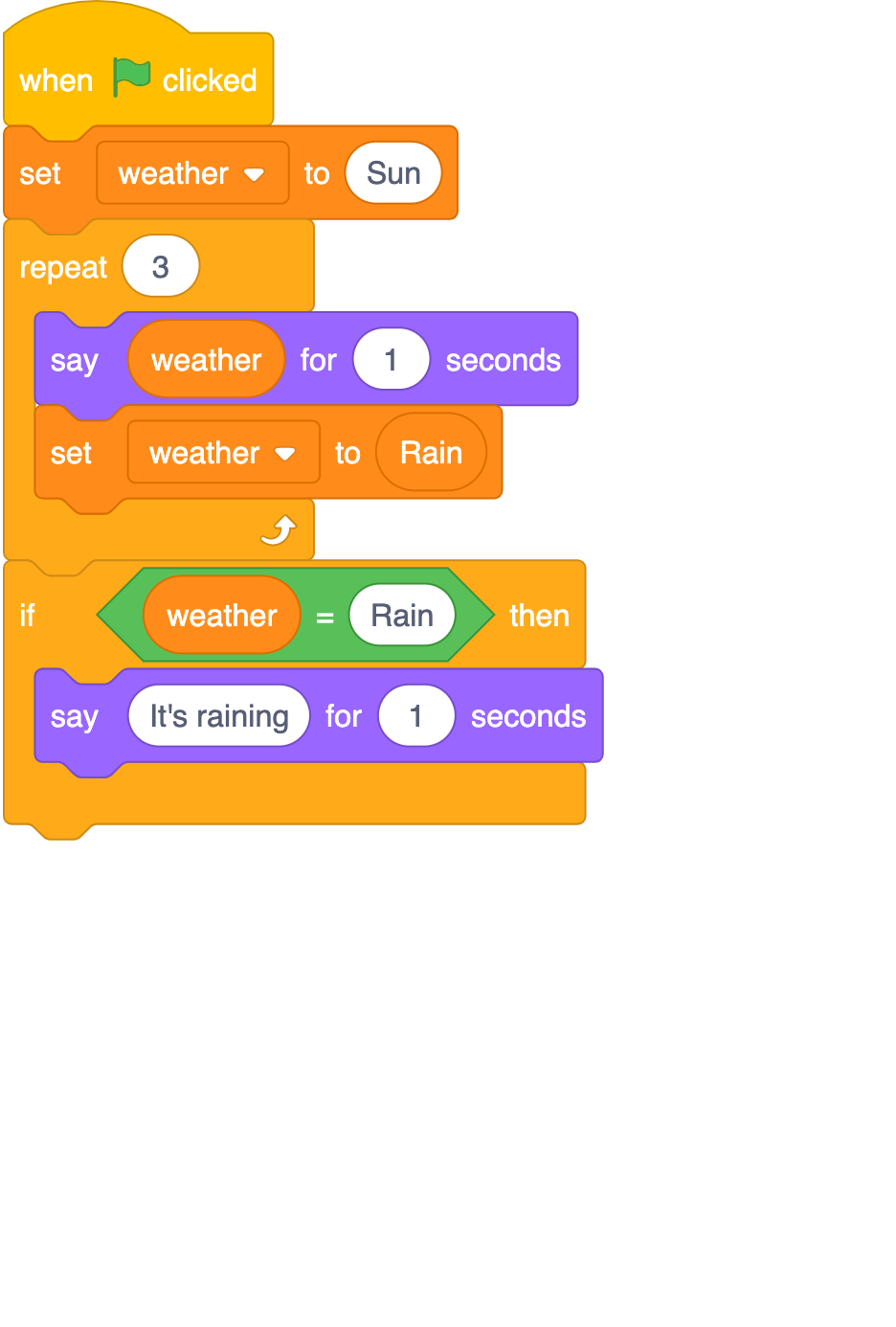
|  |  |  |  |
| --- | --- | --- | --- |
|  |  | *Tick if it evaluates to ‘true’* | *Explain why the incorrect answers evaluate as ‘false’* |
| A |  |  |  |
| B |  |  |  |
| C |  |  |  |
| D |  |  |  |

### Count-controlled iteration

Q8. Which of the following blocks of code would make the Scratch cat say “1, 2, 3” leaving a second in between each number?

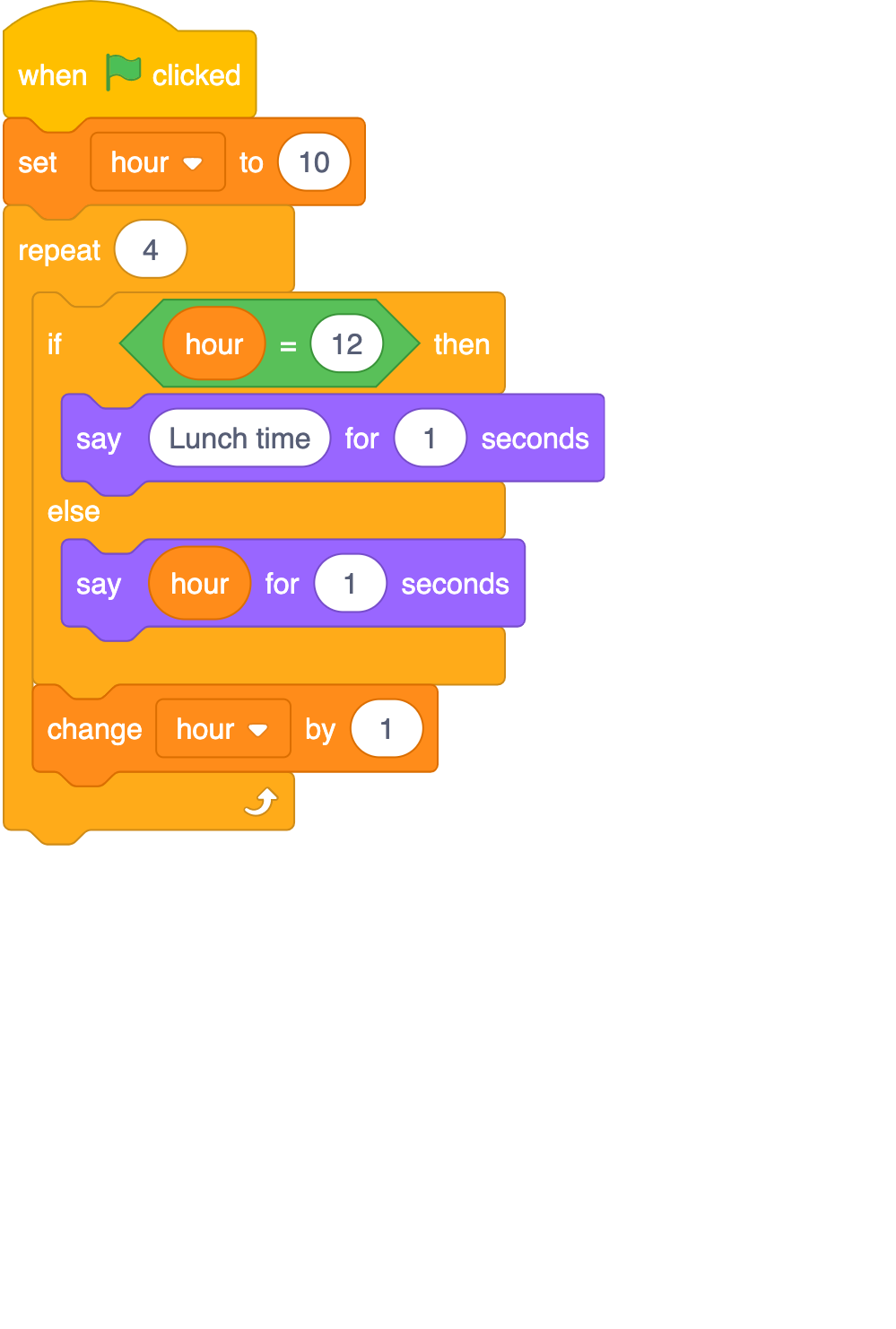
|  |  |  |  |
| --- | --- | --- | --- |
| A |  | B |  |
| C |  | D |  |

Q9. What will be outputted (what will be said) when the following program is executed?



|  |  |  |
| --- | --- | --- |
| A | Sun, Rain, It’s raining |  |
| B | Sun, Rain, Rain |  |
| C | Sun, Rain, Rain, It’s raining |  |
| D | Sun, It’s raining |  |

Q10. What will be outputted (what will be said) when the following program is executed?



|  |  |  |
| --- | --- | --- |
| A | 10, 11, Lunchtime, 12 |  |
| B | 10, 11, Lunchtime, 13 |  |
| C | 10, 11, 12, 13 |  |
| D | 10, 11, Lunchtime, 12, 13 |  |

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### Subroutines

Q11. Which of these sets of instructions is **not** a subroutine.

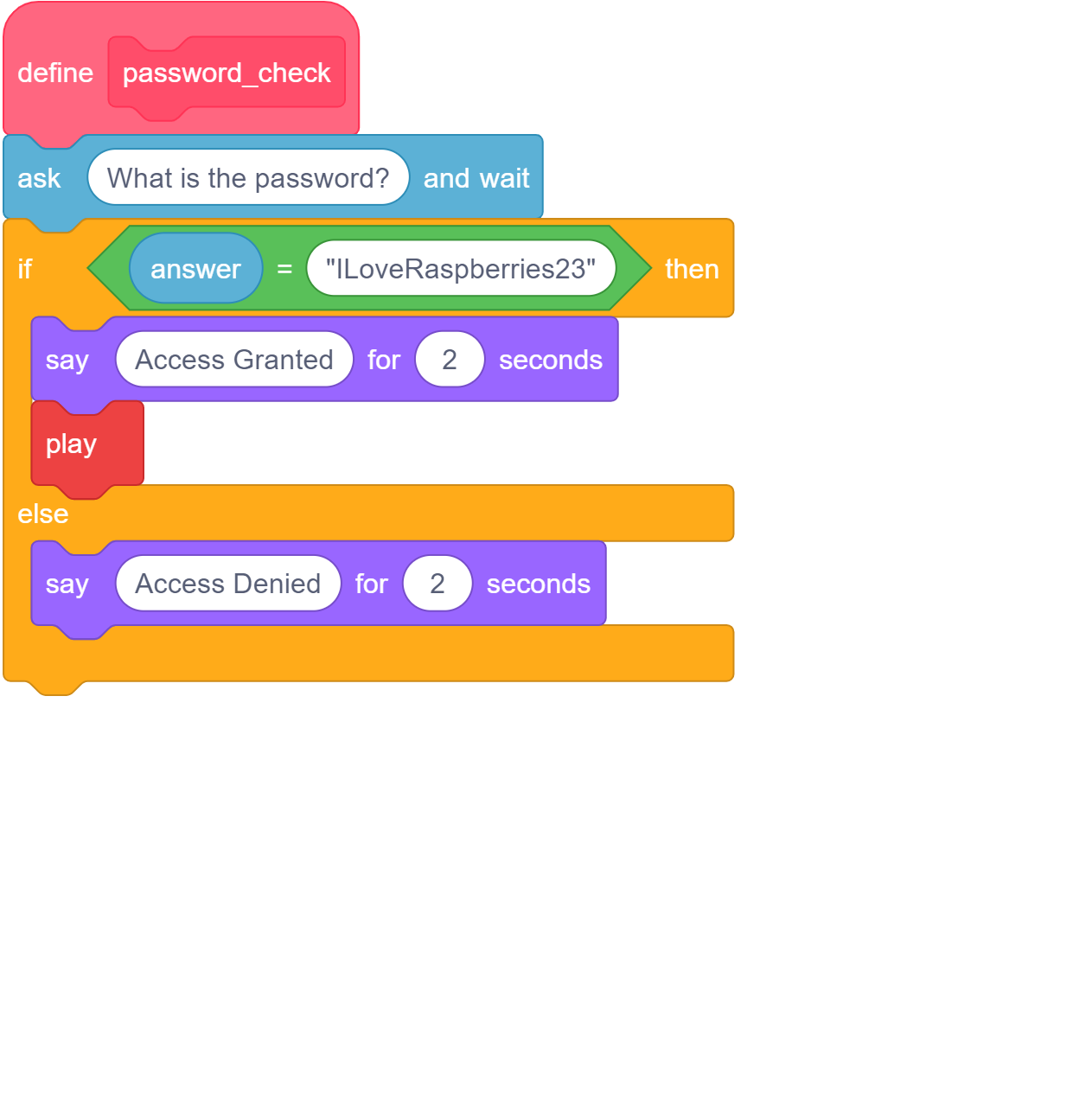
|  |  |  |  |
| --- | --- | --- | --- |
| A |  | B |  |
| C |  | D |  |

Q12. A large program has been broken down into subroutines to make the problem more manageable to solve. What is this process called?

|  |  |
| --- | --- |
| **Answer**: |  |

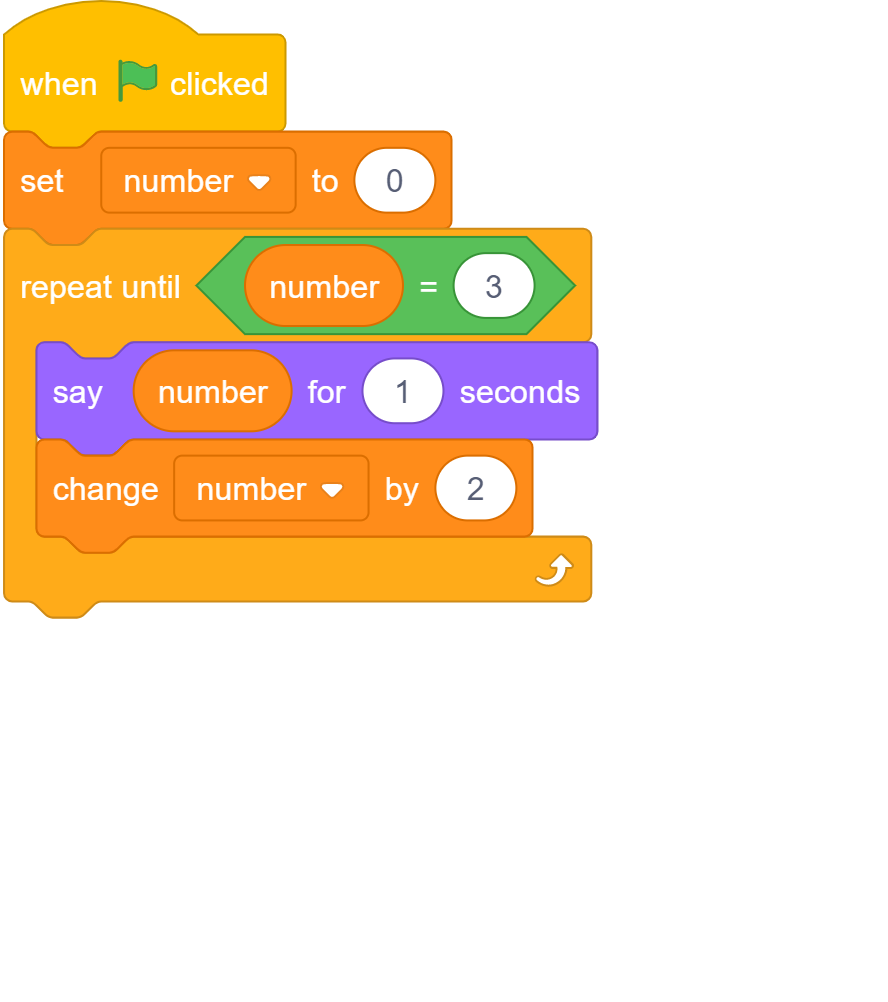
### Condition-controlled iteration

Q13. A learner has created the following piece of code to check if a password is correct or not. They want to improve it so that it will only give a maximum of three attempts before locking them out of the game for 60 seconds. What programming construct should they use for this?



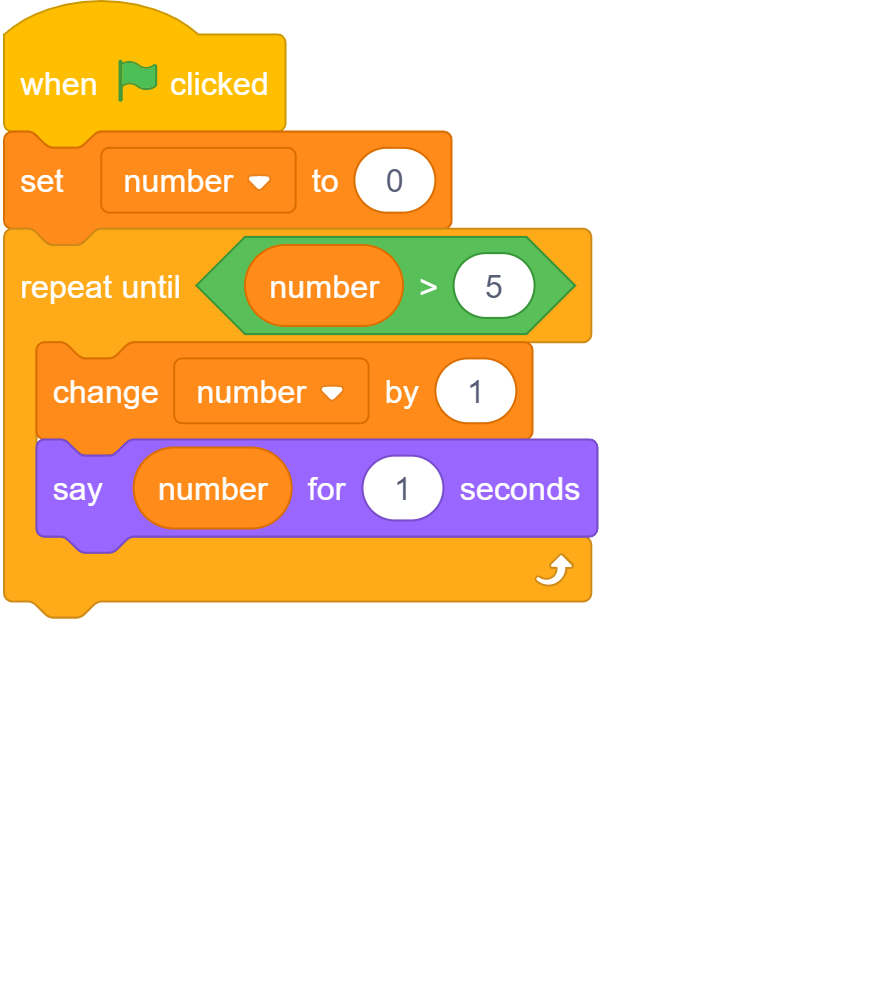
|  |  |
| --- | --- |
| A | A **Forever** loop |
| B | A **Repeat until** loop |
| C | A **Repeat 3** loop |
| D | Three **If/else** statements |

Q14. A learner has created the following block of code, when will the loop terminate?



|  |  |
| --- | --- |
| A | When ‘number’ holds the value ‘3’ |
| B | When ‘number’ holds the value ‘4’ |
| C | When ‘number’ is higher than ‘3’ |
| D | Never |

Q15. What will be the output of this program when it is executed? (What will the sprite say?)



|  |  |
| --- | --- |
| A | Nothing |
| B | 1, 2, 3, 4 |
| C | 1, 2, 3, 4, 5 |
| D | 1, 2, 3, 4, 5, 6 |

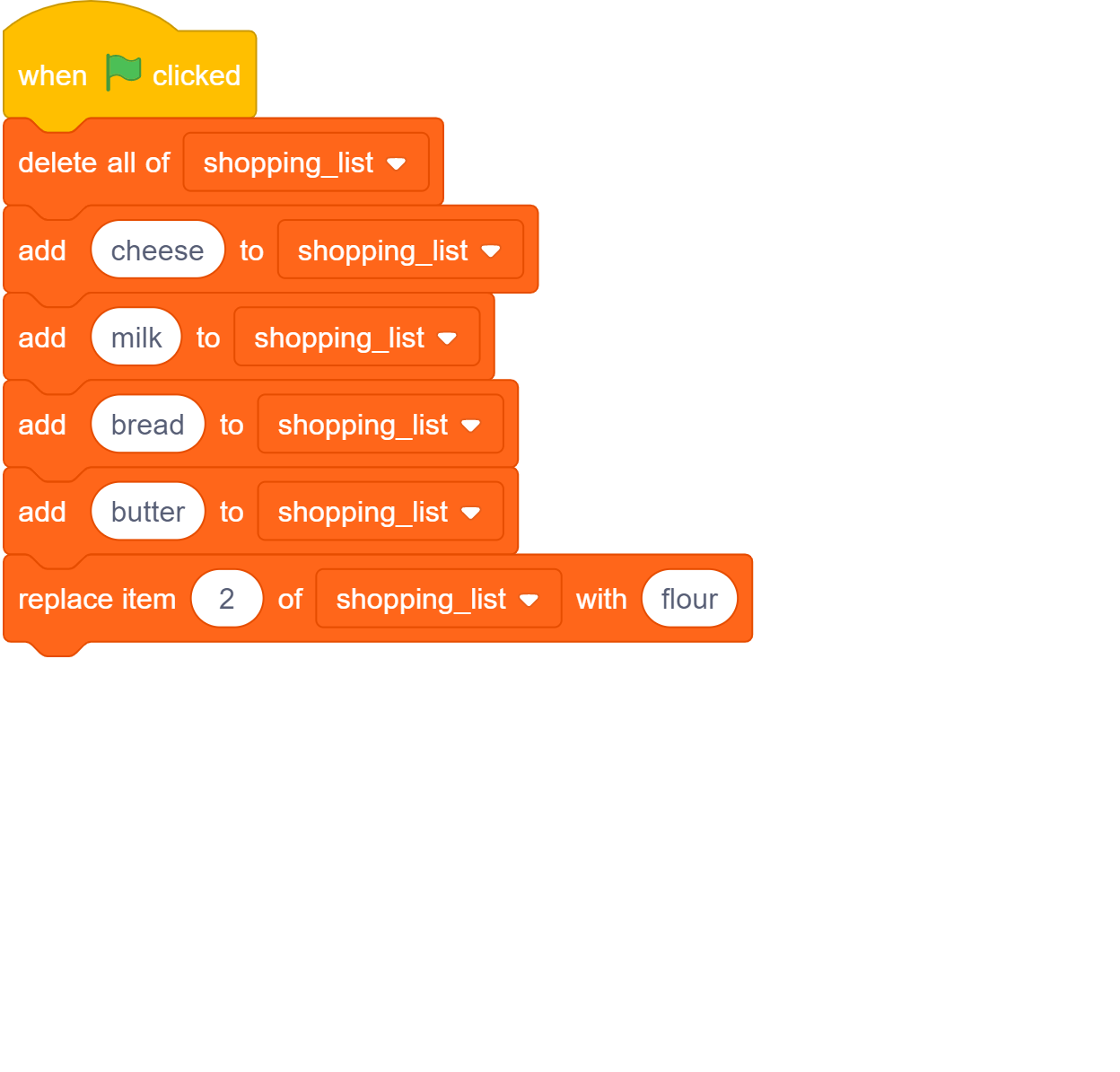
### Evaluating the loop

Q16. All of the blocks of code below will execute a countdown timer. Select the most appropriate block for this purpose when using Scratch.

|  |  |  |  |
| --- | --- | --- | --- |
| A |  | B |  |
| C |  | D |  |

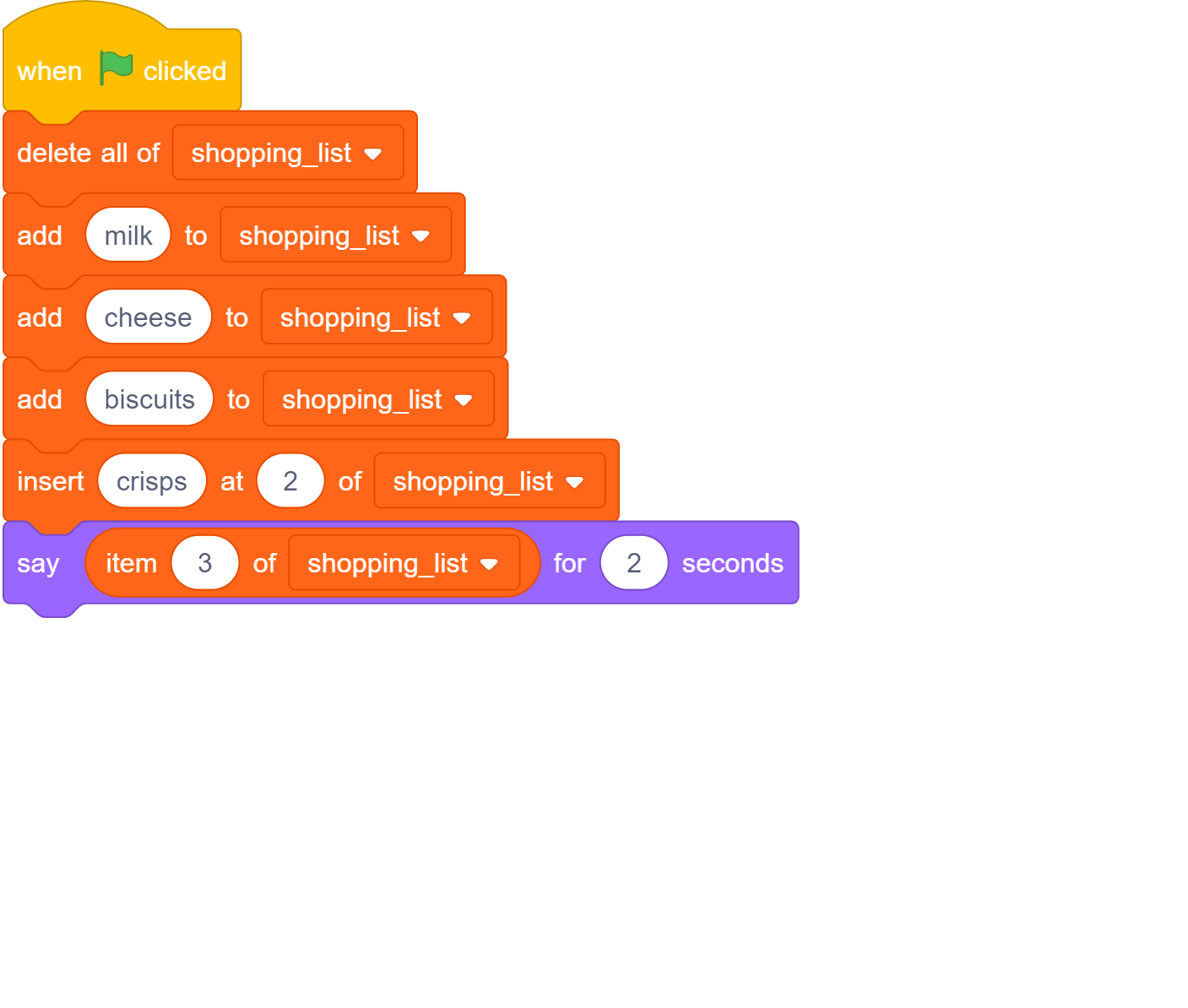
### Lists

Q17. The following block of code was used to create a shopping list and then replace a list item in ‘shopping\_list’. Which item was replaced with ‘flour’?



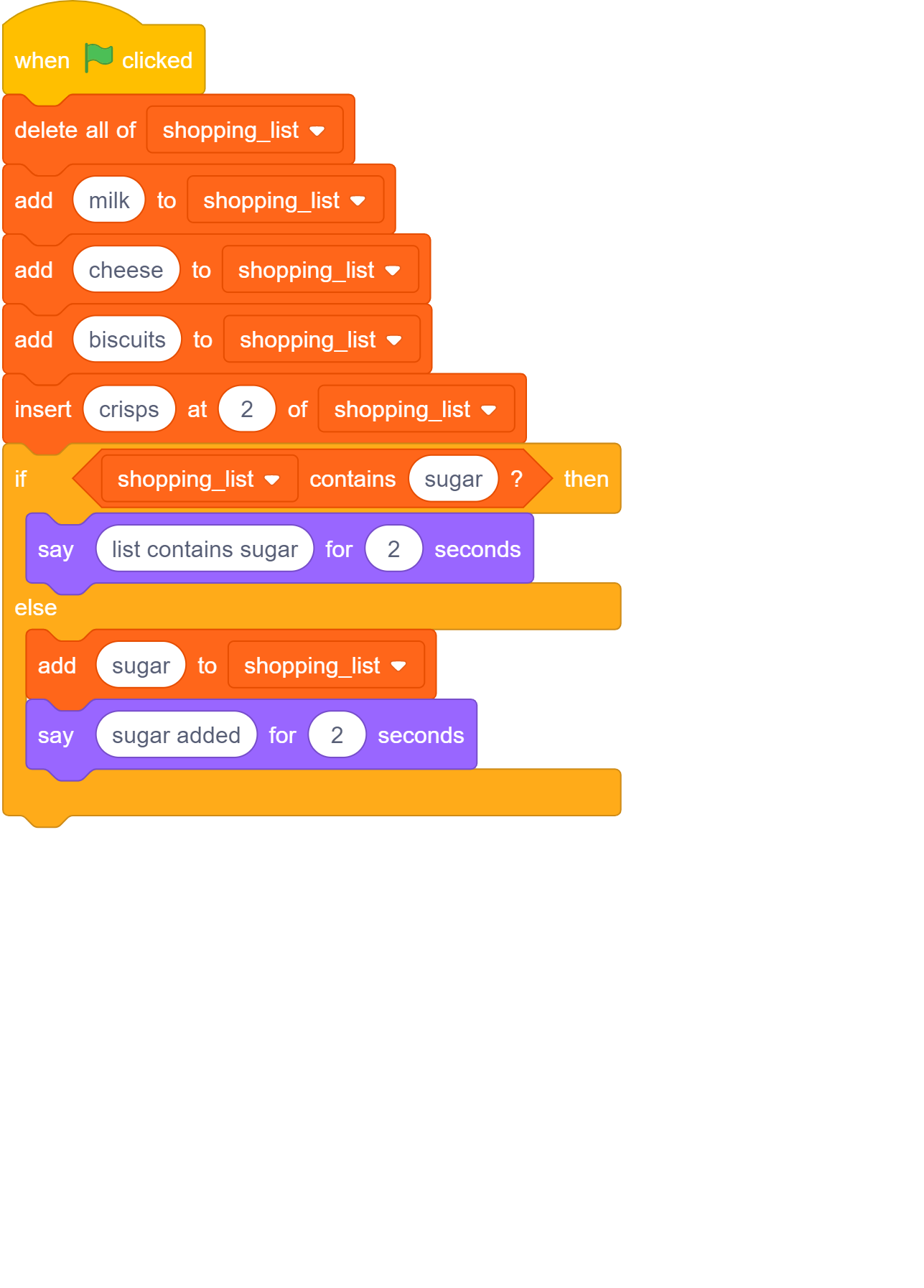
|  |  |
| --- | --- |
| **Answer** |  |

Q18. What will be the output of this program when it is executed? (What will the sprite say?)



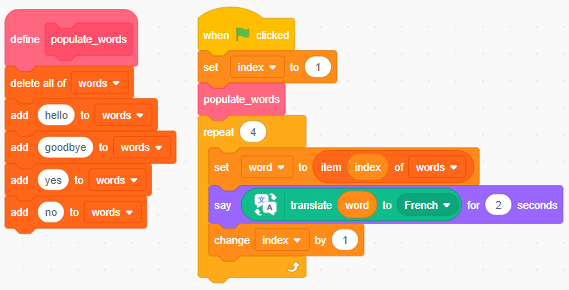
|  |  |
| --- | --- |
| **Answer** |  |

Q19. What will be the output of this program when it is executed? (What will the sprite say?)



|  |  |
| --- | --- |
| **Answer** |  |

Q20. A learner is using the **Translate** block to translate a list of words. What will be the output of this program when it is executed? (What will the sprite say?)



|  |  |
| --- | --- |
| A | hello, goodbye, yes, no |
| B | hello, hello, hello, hello |
| C | salut, au revoir, oui, non |
| D | salut, salut, salut, salut |

**[END OF TEST]**

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