Computing

Treasure those lists!
Lesson 4 of 6

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Investigate the code

Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-legendofscratch

Instruction 1

- Click on the monkey sprite to view the code
- Walk to the monkey (avoid objects)

Question 1

What does the monkey say when you touch it?

Question 2

What item needs to be in your inventory for the monkey to say "Thanks for the watermelon!"

Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-legendofscratch

Instruction 3

- Click on the watermelon sprite to view the code
- Walk to the watermelon

Question 3

Where does the item watermelon appear in the inventory list?

Instruction 4

- Click on the monkey sprite to view the code
- Walk to the monkey

Question 4

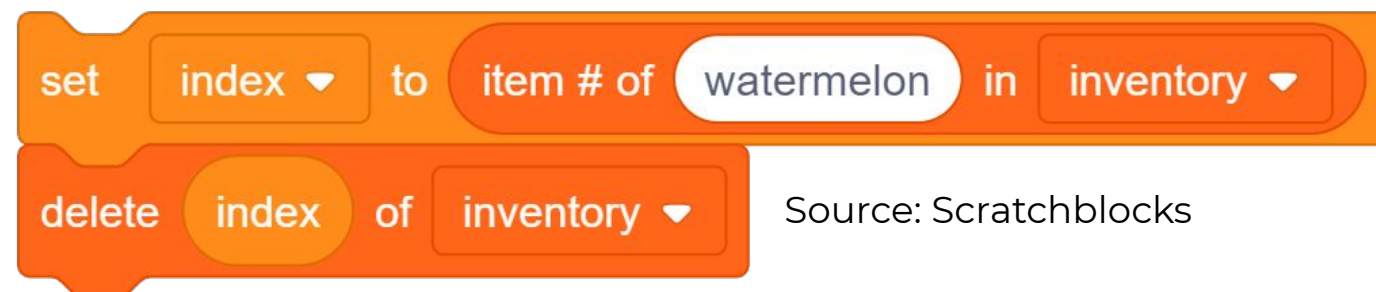What has happened to the watermelon item in the inventory list?

Investigate the code

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Instruction 5

Find this block of code in the monkey sprite:

Source: Scratchblocks

Question 5

This block checks for the index location of the watermelon and then it deletes the item that is in that location. What was the list item number for the watermelon?

Where was the index number held for this block of code to work?

Investigate the code

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Instruction 6

- Click on the goblin sprite to view the code
- Walk to the goblin

Question 6

What is now being held in the inventory list?

Instruction 7

Source: Scratchblocks

Question 7

This block of code does two things. Describe those two things.

Investigate the code

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Instruction 8

- Click on the present sprite to view the code
- Walk to the present

Question 8

Describe what happens when Scratch touches the present.

Question 9

Which items are now in the inventory list?

Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-legendofscratch

Instruction 10
- Click on the centaur sprite to view the code   - Walk to the centaur

Question 10
What condition needs to be true for the player to go to the next level?

Investigate the code

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Instruction 11

- Press the Green flag to restart the game
- Collect the apple, diamond, present, and watermelon (don't give it to the monkey)
- Walk to the centaur

Question 11

What does the centaur say when you have the watermelon in your list?

Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-legendofscratch

Instruction 12

- Click on the cake sprite to view the code

Question 12

What actions does the cake sprite currently do?

Instruction 13

- Modify the cake block

Question 13

The cake is needed for the next level. Using the code from the apple sprite as a guide, add the cake to the inventory when it is touching Scratch the cat.

Modify the code (optional tasks)

1. Modify the centaur code to ensure that the cake is required before the player is sent to the next level.
2. Using the gift code as a guide, create another sprite that will perform the same tasks, e.g. disappear and add to the list when touching Scratch.
3. Using the monkey code as a guide, create another sprite that will delete that list item from the inventory.
4. Using the goblin code as a guide, create another sprite that will swap an additional item with Scratch the cat.
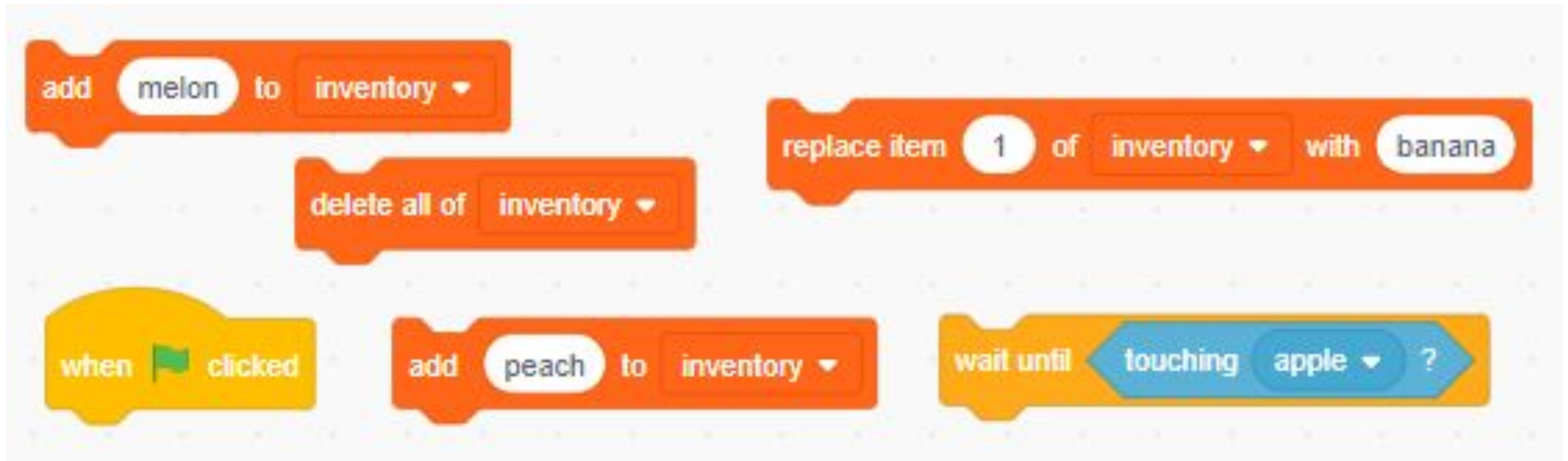
Parsons puzzle

Parsons puzzle

A game uses a list to store an inventory of items collected on a treasure hunt. At the beginning of the game, the inventory list must be empty. Peach and melon are then added to the inventory and the code waits for the player to touch the apple. When the apple is found, the peach is replaced by the banana.

The blocks on the next slide are all you need to code this sequence. Write them on your paper in the correct order. You do not need to draw the blocks, you can simply write the text that is inside them. For example, When green flag clicked.

Parsons puzzle

Source: Scratch