

Creative Coding with Scratch

Disco Diva



Getting Started

Select **Spotlight** backdrop.

Choose **Jouvi Dance** from the sprite library and decrease size.

Position sprite centre stage.

Challenge 1

Can you add music to your show?

Challenge 2

Can you make the backdrop change colour?

Challenge 3

Can you use costume changes to animate a sprite?

Challenge 4

Can you make **Jouvi Dance** talk during their dance?

Can you add other dancers to the stage?

I can:

change the size and position of sprites;
add sound effects;
make a backdrop change colour;
use costume changes to animate a sprite;
make a sprite talk;
program more than one sprite.

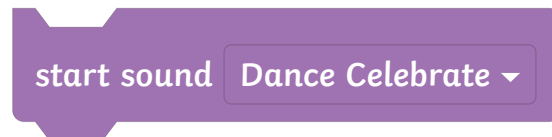
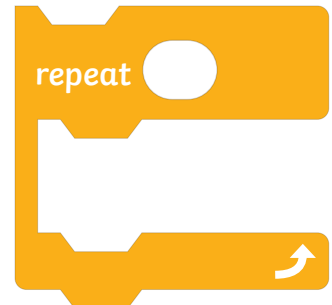
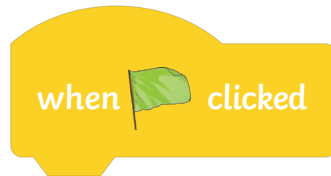
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Helpful Hints

Disco Diva

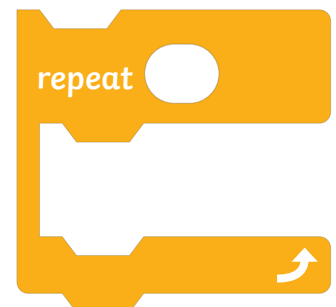
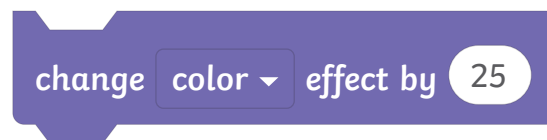
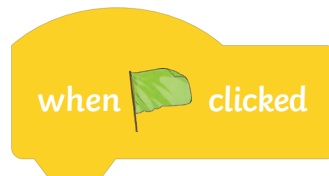
Use these hints to help you complete the challenges. They will not give you the complete solution to the algorithm but should help you on your way.

To add music:

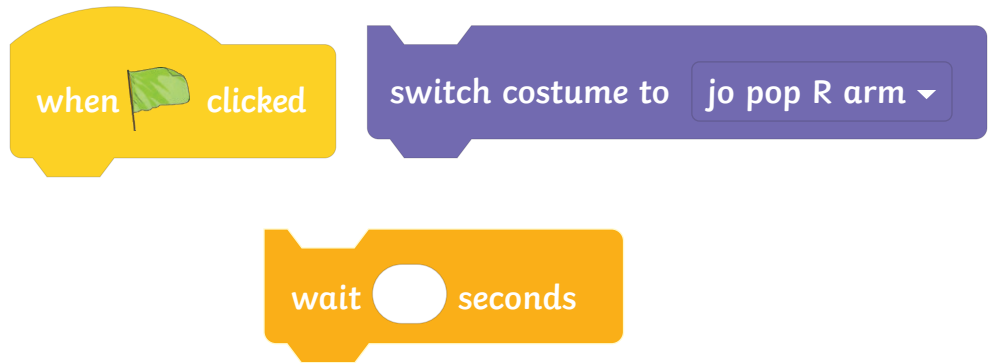


To change the colour of the backdrop:

Tip: Ensure that the command area is for the backdrop and not the sprite.



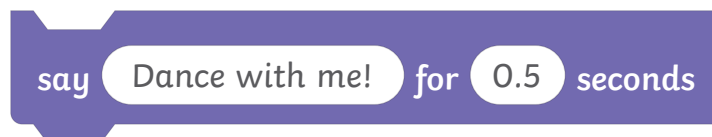
To use costume changes to animate a sprite:



Top Tip

Repeat the **switch costume to** and **wait** blocks to add as many different costumes as you want to animate your sprite.

To make a sprite talk:



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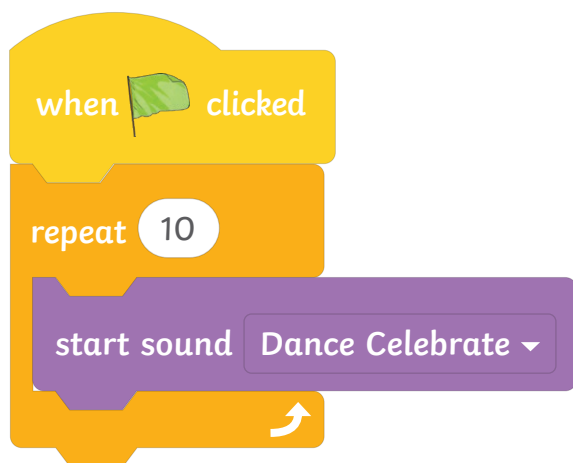
Disco Diva Answers

Each Creative Coding Challenge is an open-ended task, which can be approached in many different ways. Pupils should be encouraged to have a go and tackle these tasks independently. The helpful hints are not intended to provide complete solutions but may serve as useful cues for supporting less-confident coders.

The following algorithms are just one possible solution to each challenge.

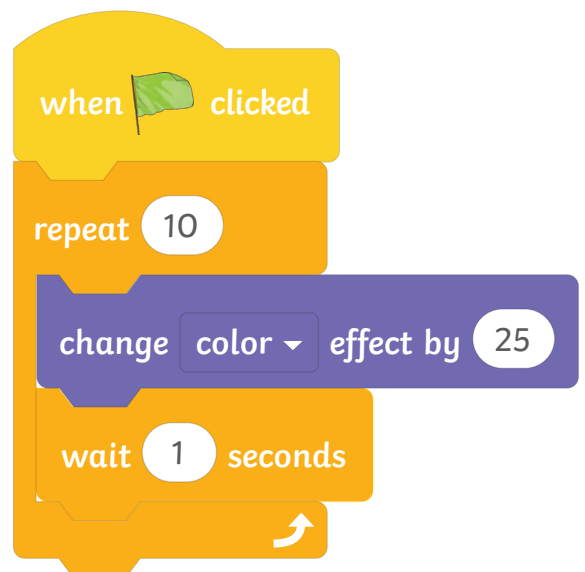
Challenge 1

The following code belongs on either **Jouvi Dance** or the backdrop:



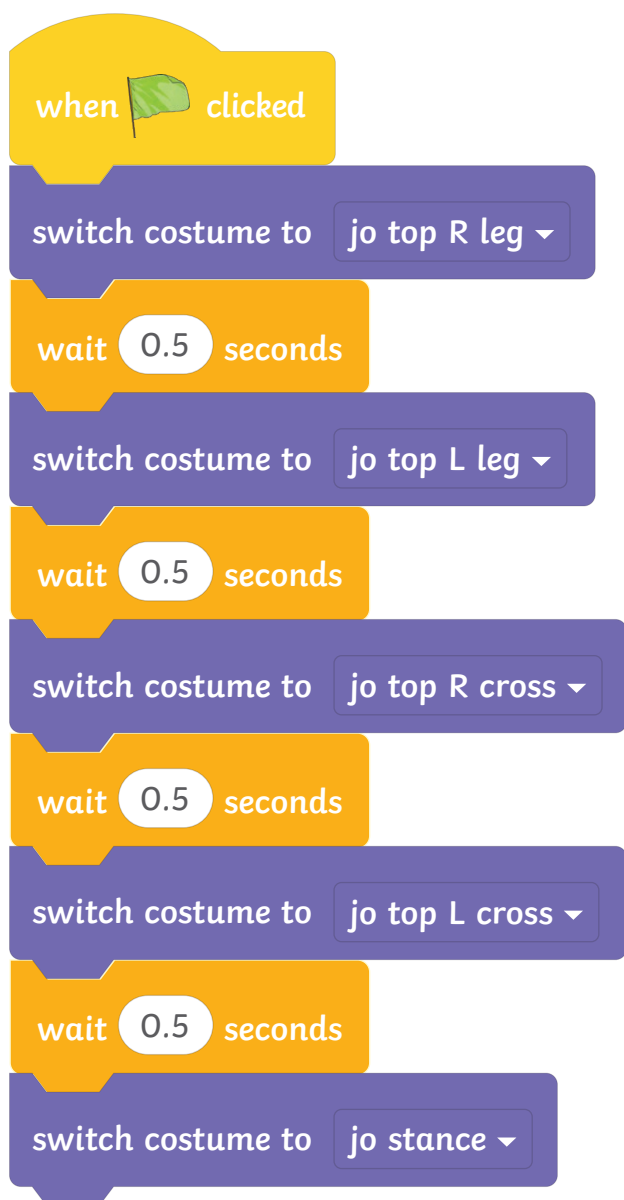
Challenge 2

The following code belongs on the backdrop:



Challenge 3

The following code belongs on
Jouvi Dance:

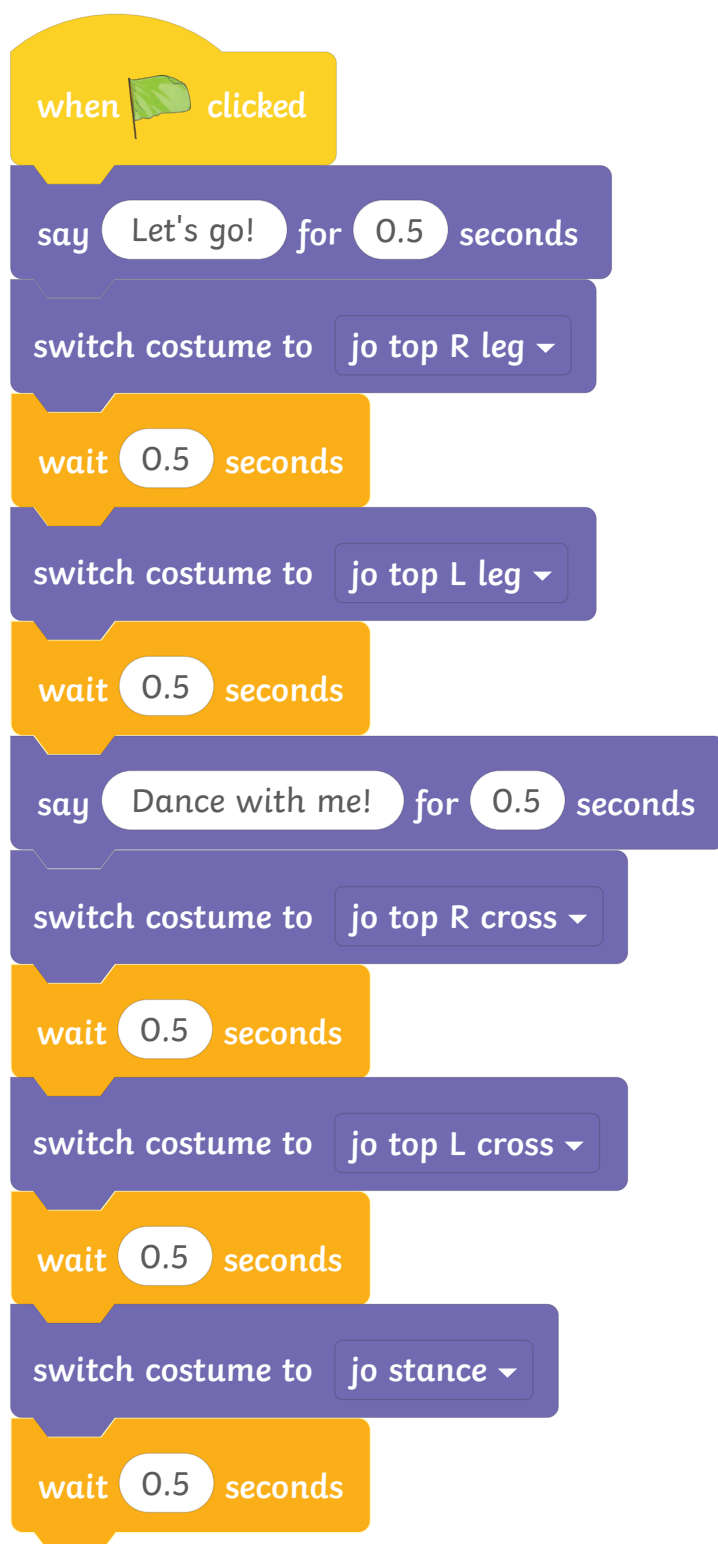


```
when green flag clicked
  switch costume to jo top R leg
  wait 0.5 seconds
  switch costume to jo top L leg
  wait 0.5 seconds
  switch costume to jo top R cross
  wait 0.5 seconds
  switch costume to jo top L cross
  wait 0.5 seconds
  switch costume to jo stance
```

The code for Challenge 3 is a sequence of costume changes with 0.5-second waits. It starts with 'when green flag clicked', followed by switching to 'jo top R leg', waiting 0.5 seconds, switching to 'jo top L leg', waiting 0.5 seconds, switching to 'jo top R cross', waiting 0.5 seconds, switching to 'jo top L cross', waiting 0.5 seconds, and finally switching to 'jo stance'.

Challenge 4

The following code belongs on
Jouvi Dance:



```
when green flag clicked
  say Let's go! for 0.5 seconds
  switch costume to jo top R leg
  wait 0.5 seconds
  switch costume to jo top L leg
  wait 0.5 seconds
  say Dance with me! for 0.5 seconds
  switch costume to jo top R cross
  wait 0.5 seconds
  switch costume to jo top L cross
  wait 0.5 seconds
  switch costume to jo stance
  wait 0.5 seconds
```

The code for Challenge 4 is a sequence of costume changes with 0.5-second waits, including speech bubbles. It starts with 'when green flag clicked', followed by saying 'Let's go!' for 0.5 seconds, switching to 'jo top R leg', waiting 0.5 seconds, switching to 'jo top L leg', waiting 0.5 seconds, saying 'Dance with me!' for 0.5 seconds, switching to 'jo top R cross', waiting 0.5 seconds, switching to 'jo top L cross', waiting 0.5 seconds, switching to 'jo stance', and finally waiting 0.5 seconds.