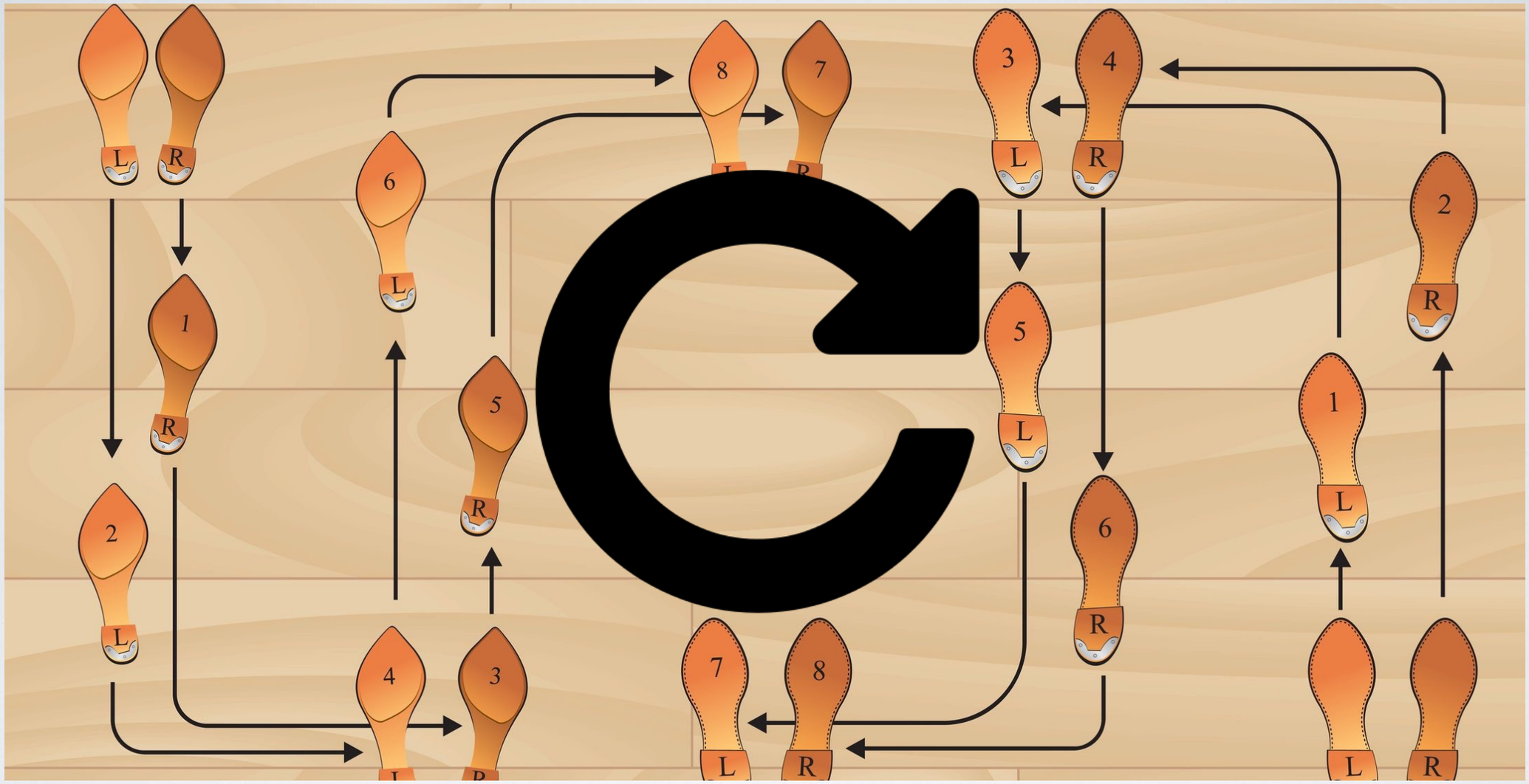
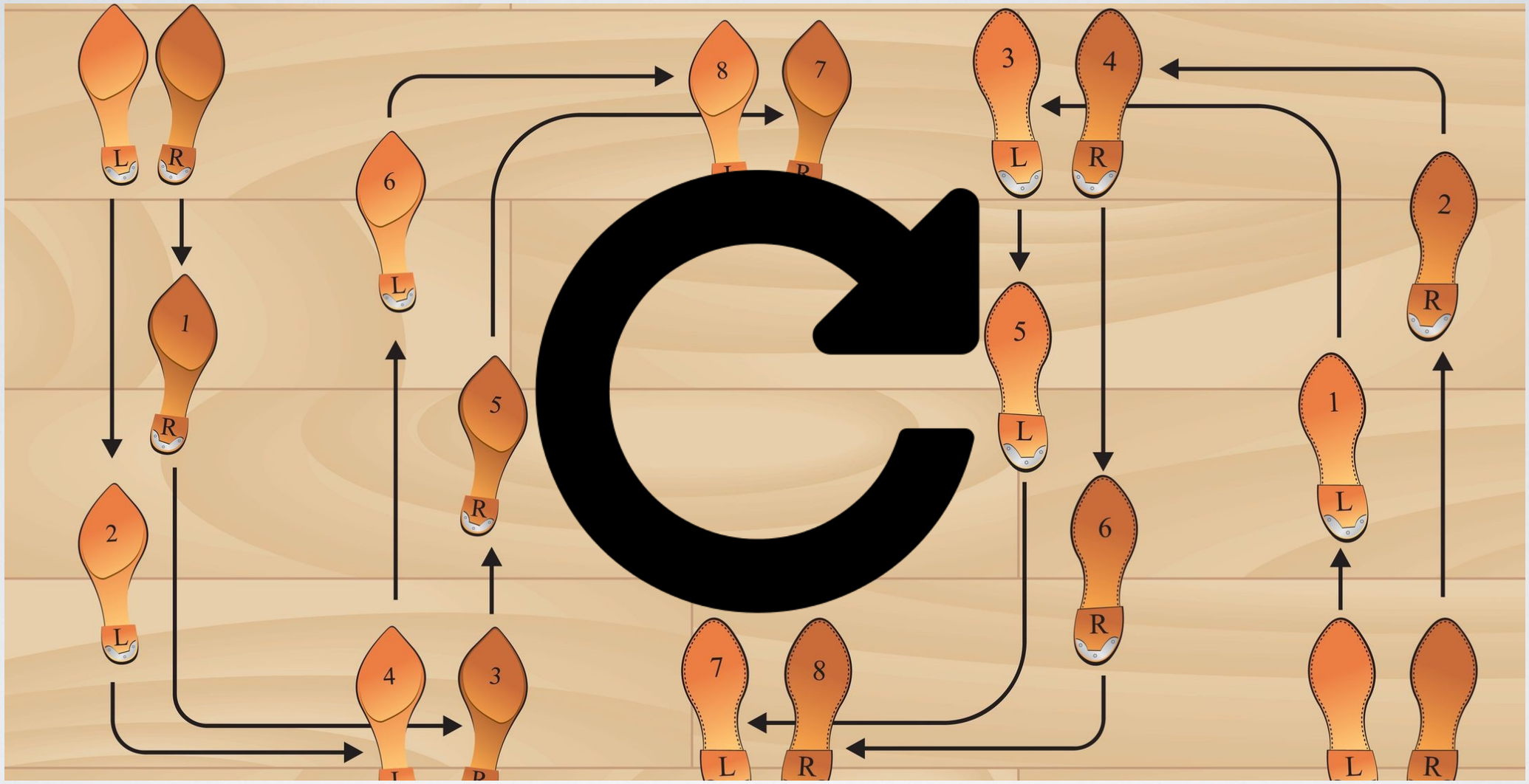
THINK AGAIN AND AGAIN:
WHILE LOOPS

Lesson 5



LET’S DANCE—AGAIN



LET’S DANCE—AGAIN

LET’S DISCUSS

- What was the dance we did together?
- How would you use for loops to write the function for the dance?
- Now think about if you wanted to do that dance at the school dance but you didn’t know what song was going to come on. How would you know when to stop dancing at the end of the song?

LET’S DISCUSS

- What was the dance we did together?
- How would you use for loops to write the function for the dance?
- Now think about if you wanted to do that dance at the school dance but you didn’t know what song was going to come on. How would you know when to stop dancing at the end of the song?

IMPORTANT VOCABULARY

While Loop: A loop that runs a block of code as long as a given condition is true. When the condition is false, the loop stops running.

While the song plays, dance.

IMPORTANT VOCABULARY

While Loop: A loop that runs a block of code as long as a given condition is true. When the condition is false, the loop stops running.

While the song plays, dance.

HIDE AND SEEK—AGAIN

1. Let’s make another video of you giving directions. Hide the object again and tell someone else how to find it.

2. This time, make sure to use functions, for loops, and while loops where you can.

3. Record your video from one spot. Do not use the camera to show where the object is hidden.

HIDE AND SEEK—AGAIN

1. Let’s make another video of you giving directions. Hide the object again and tell someone else how to find it.

2. This time, make sure to use functions, for loops, and while loops where you can.

3. Record your video from one spot. Do not use the camera to show where the object is hidden.

Share your video with a partner via AirDrop and have them follow your directions!

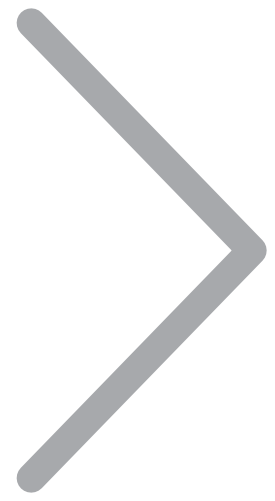
Were your directions successful?

Share your video with a partner via AirDrop and have them follow your directions!

Were your directions successful?

LET’S DISCUSS

LET’S DISCUSS



1. Let’s make another video of you giving directions. Hide the object again and tell someone else how to find it.

2. This time, make sure to use functions, for loops, and while loops where you can.

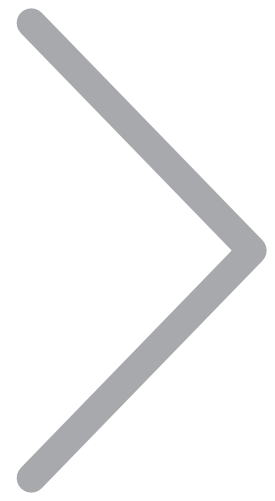
3. Record your video from one spot. Do not use the camera to show where the object is hidden.

LET’S DISCUSS

1. Let’s make another video of you giving directions. Hide the object again and tell someone else how to find it.
2. This time, make sure to use functions, for loops, and while loops where you can.
3. Record your video from one spot. Do not use the camera to show where the object is hidden.

LET’S DISCUSS

LET’S DISCUSS



4. What languages or words did you use?

5. Did having to use loops this time make things easier, or were there actually cases where it was harder?

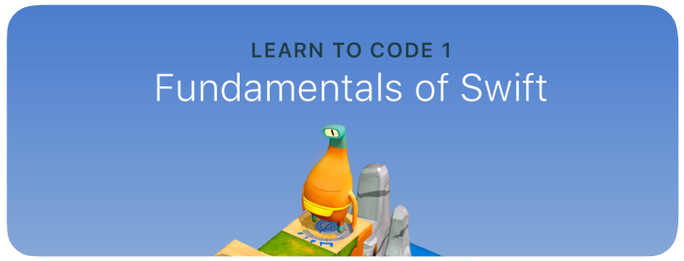
LET’S DISCUSS

4. What languages or words did you use?

5. Did having to use loops this time make things easier, or were there actually cases where it was harder?

TIME FOR SWIFT PLAYGROUNDS

Chapter: While Loops

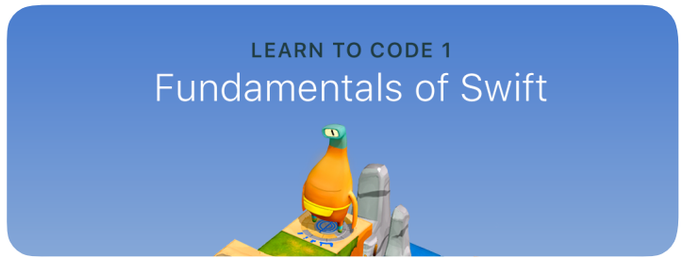


While Loops	
Introduction	✓
Running Code While…	✓
Creating Smarter While Loops	✓
Choosing the Correct Tool	✓
Four by Four	✓
Turned Around	✓
Land of Bounty	✓
Nesting Loops	✓
Shapeshifter	✓
You're Always Right	✓

REMINDER: Take videos and or photos of your playgrounds. You will need them for your portfolio.

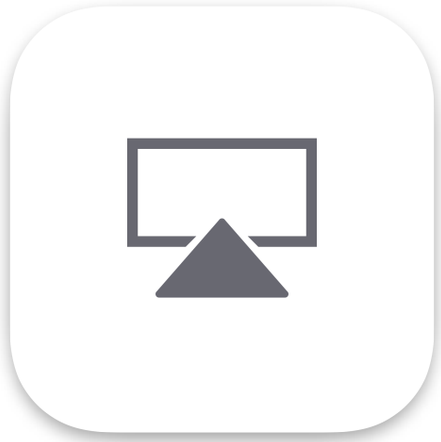
TIME FOR SWIFT PLAYGROUNDS

Chapter: While Loops

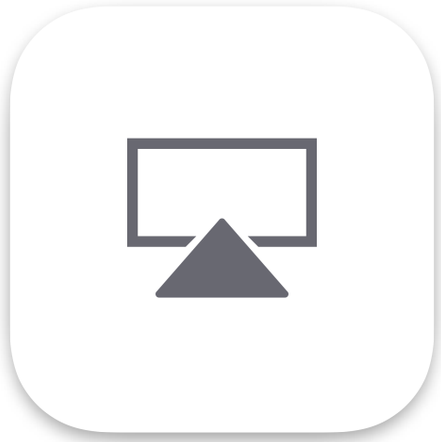


While Loops	
Introduction	✓
Running Code While…	✓
Creating Smarter While Loops	✓
Choosing the Correct Tool	✓
Four by Four	✓
Turned Around	✓
Land of Bounty	✓
Nesting Loops	✓
Shapeshifter	✓
You're Always Right	✓

REMINDER: Take videos and or photos of your playgrounds. You will need them for your portfolio.



Share what you did in Swift Playgrounds with AirPlay.



Share what you did in Swift Playgrounds with AirPlay.

LET’S REFLECT

1. When did you use for loops and while loops in the app? How did you decide?

2. In the app, you also learned to nest loops, where you place one loop inside another. Can you think of instances in everyday life where you would nest loops? What would be the outer and inner loops?"

LET’S REFLECT

1. When did you use for loops and while loops in the app? How did you decide?

2. In the app, you also learned to nest loops, where you place one loop inside another. Can you think of instances in everyday life where you would nest loops? What would be the outer and inner loops?"

LET’S REFLECT

3. Did the two videos you made from Lesson 1 and this lesson differ in the quality of directions? Was one better than the other, or were they the same?
4. Let’s think again and again: How does thinking like a computer differ from thinking like a human?

Think ahead: How do the codes you've learned so far work together?

LET’S REFLECT

3. Did the two videos you made from Lesson 1 and this lesson differ in the quality of directions? Was one better than the other, or were they the same?
4. Let’s think again and again: How does thinking like a computer differ from thinking like a human?

Think ahead: How do the codes you've learned so far work together?

JOURNAL

1. Upload your video comparisons.
2. Upload screenshots from Swift Playgrounds.
3. Record answers to these questions:
    - What is a while loop and how does it differ from a for loop? (Use your own words.)
    - How do loops help with coding and how do they help with everyday life?

JOURNAL

1. Upload your video comparisons.
2. Upload screenshots from Swift Playgrounds.
3. Record answers to these questions:
    - What is a while loop and how does it differ from a for loop? (Use your own words.)
    - How do loops help with coding and how do they help with everyday life?