

Course C Lesson 10 Loops with Rey and BB-8

Look at [Puzzle 9](#)

Identify the patterns in this puzzle:

Code all of the steps with just using moves and turns:



```
when run
move forward
turn right 90
move forward
turn left 90
move forward
turn right 90
move forward
turn left 90
move forward
turn right 90
move forward
turn left 90
move forward
turn right 90
move forward
turn left 90
move forward
turn right 90
move forward
turn left 90
```

Separate out what is repeated:

```
when run
move forward
turn right 90
move forward
turn left 90

move forward
turn right 90
move forward
turn left 90

move forward
turn right 90
move forward
turn left 90

move forward
turn right 90
move forward
turn left 90

move forward
turn right 90
move forward
turn left 90
```

Add the repeat loop around what is repeated.



Since these programs can be slightly confusing, it would be fun to learn a new way of programming called pair programming. It is when you work with a partner to work through the puzzles in a unique way. Find a buddy, friend, parent, or brother or sister to do Pair Programming with.

Watch the following video:

[Pair Programming](#)

Remember the rules for Pair Programming:

Navigator:

- Stay in your own chair
- Keep hands off of the keyboard and mouse
- Describe nicely what the driver is supposed to do

Driver:

- Do what the navigator says, even when you know it is wrong.
- You can help them see what is wrong.

Practice pair programming while working with Rey and BB-8.

Watch the following videos to see what BB-8 needs to do:

[Programming with Rey and BB-8](#)

[Repeat Blocks with BB-8](#)

With your pair programming partner, switch off each lesson between navigating and driving. If you don't have a partner to do pair programming, you can just go through each puzzle on your own. Start with [puzzle 2](#) and work through the rest of the lesson. When you are finished, you may move on to the next lesson.