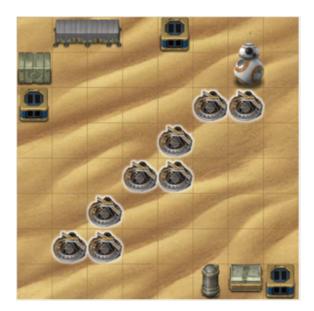
Course C Lesson 10 Loops with Rey and BB-8

Look at Puzzle 9

Identify the patterns in this puzzle: Code all of the steps with just using moves and turns:



move (forward ▼ turn (right & ▼ move [forward ▼ turn (left ∪ V move [forward ▼ turn (right & ▼ move [forward ▼ turn (left ♥ V move forward V turn (right & ▼ move [forward ▼ turn (left ∪ V move (forward ▼ turn (right C ▼ move [forward ▼ turn (left ∪ ▼ move (forward ▼ turn (right Ĉ ▼ move [forward ▼ turn (left ∪ V

Separate out what is repeated:

```
move forward v
turn left O v

move forward v
turn left O v
```

Add the repeat loop around what is repeated.

```
when run

repeat 5 times

do move forward turn right c move forward turn left c v
```

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.