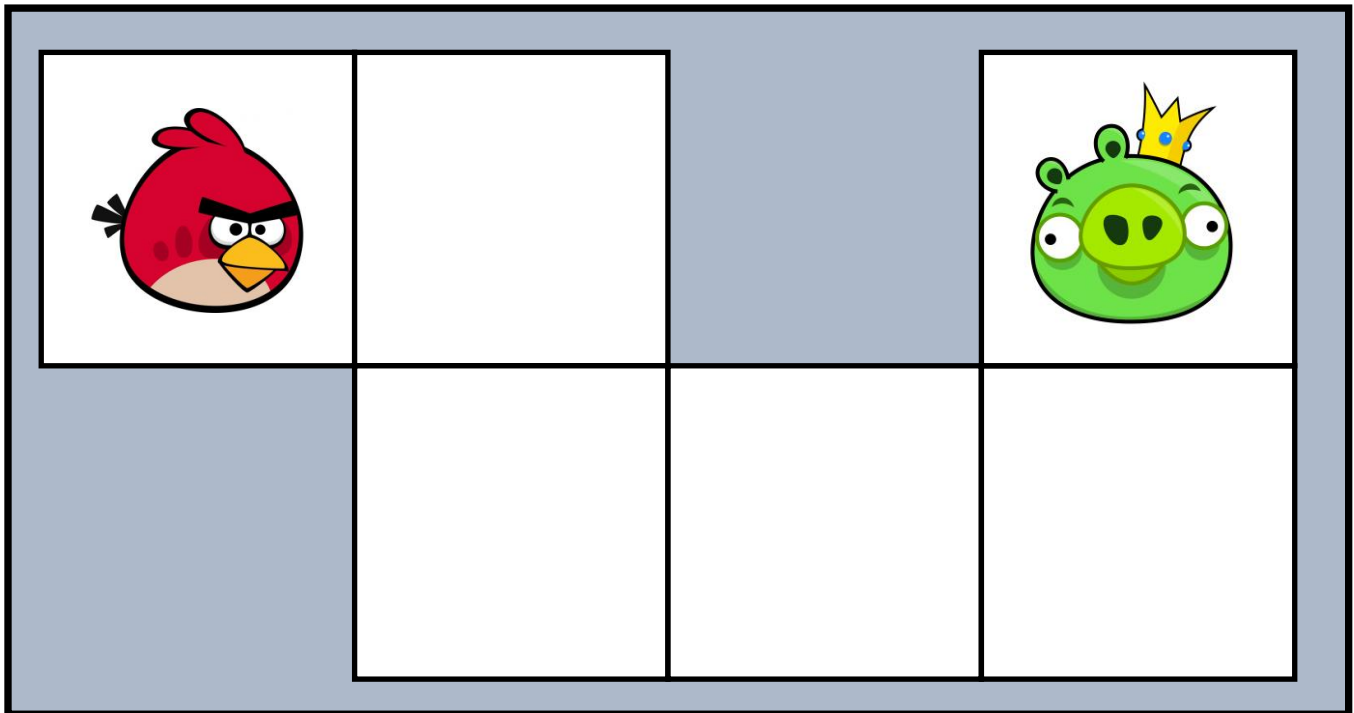
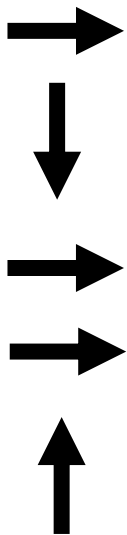


Introduction to Sphero Blocks



Directions



Code.org (Turn Coding)

```

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

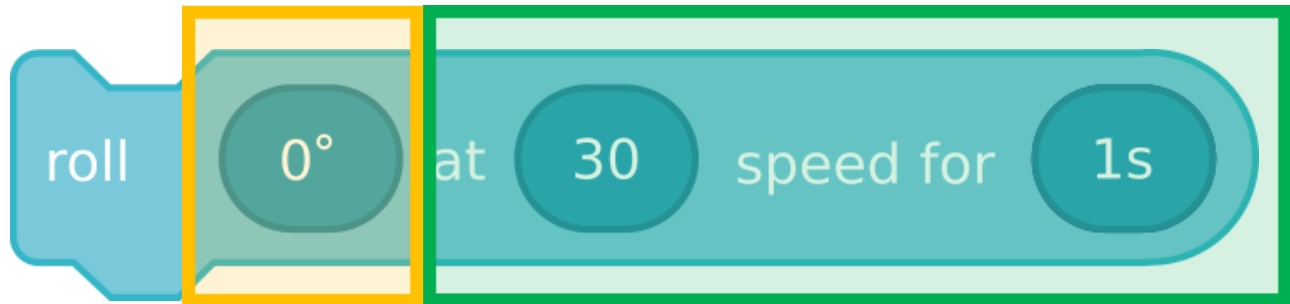
Sphero (Shuffle Coding)

```

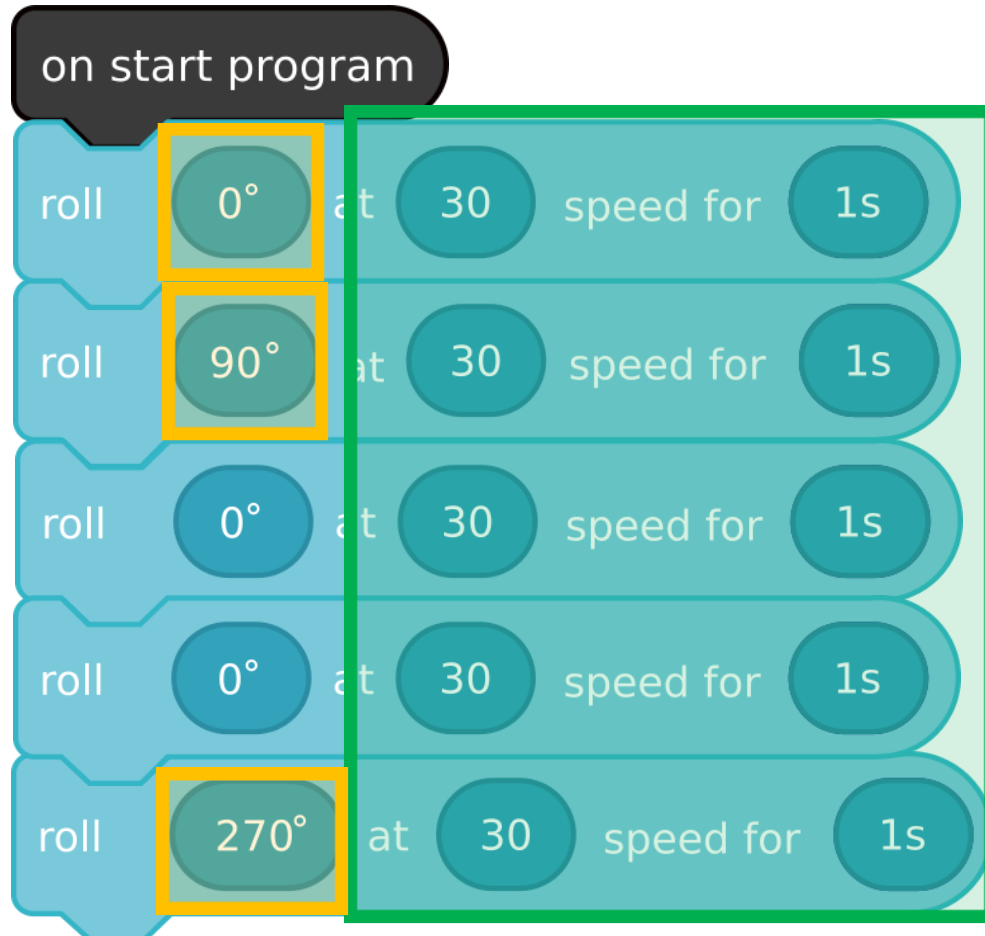
on start program
  roll 0° at 30 speed for 1s
  delay for 1s
  roll 90° at 30 speed for 1s
  delay for 1s
  roll 0° at 30 speed for 1s
  roll 0° at 30 speed for 1s
  delay for 1s
  roll 270° at 30 speed for 1s
    
```

How are the new blocks different and similar? In what ways does Red move differently?

Let's take a closer look at one of the Sphero blocks



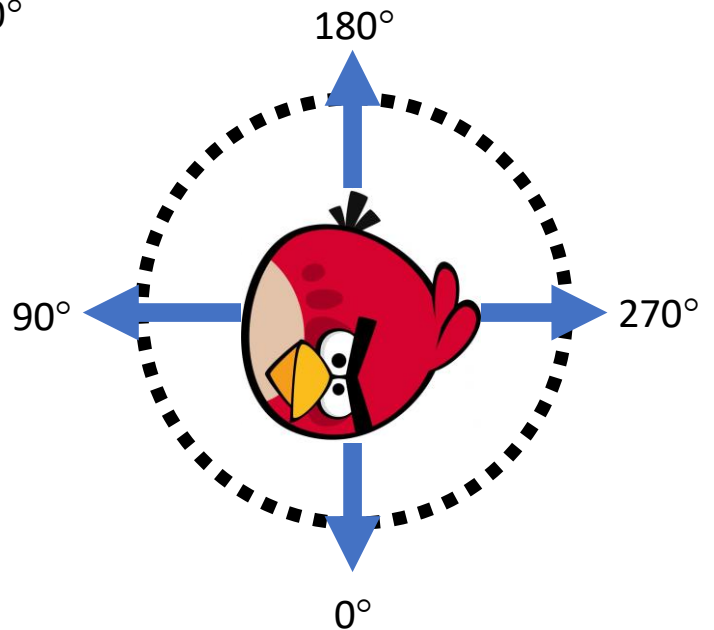
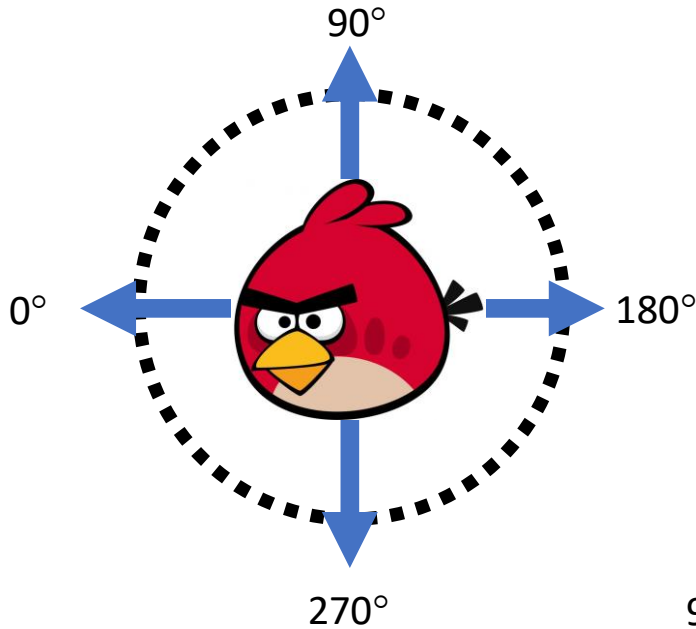
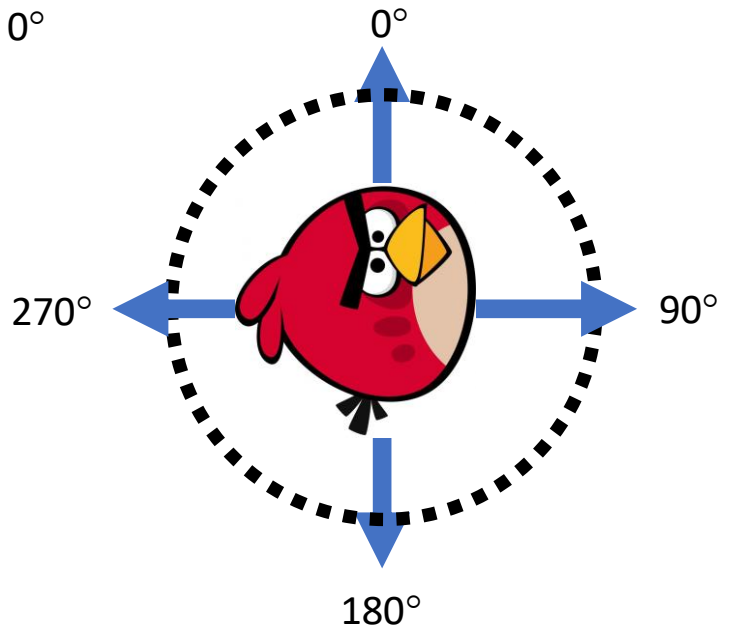
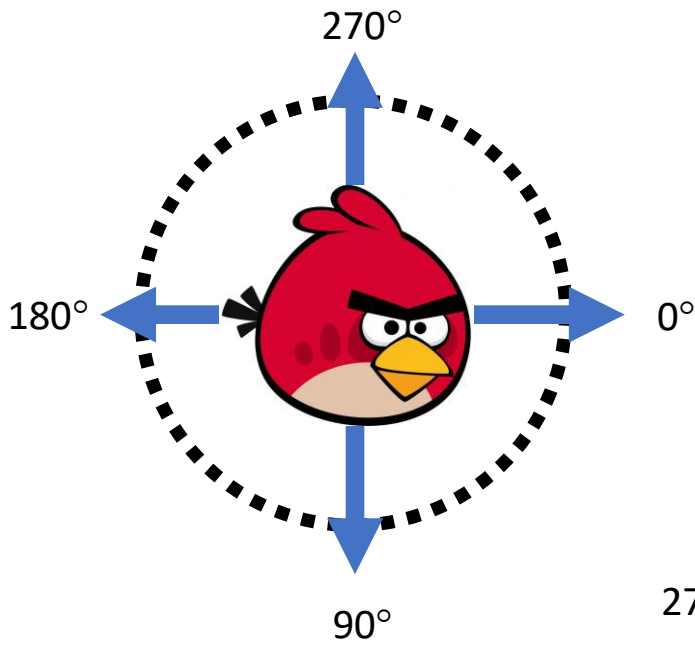
This type of block is called a **roll block**. Every roll block can be broken up into two parts: **direct** and **move**.



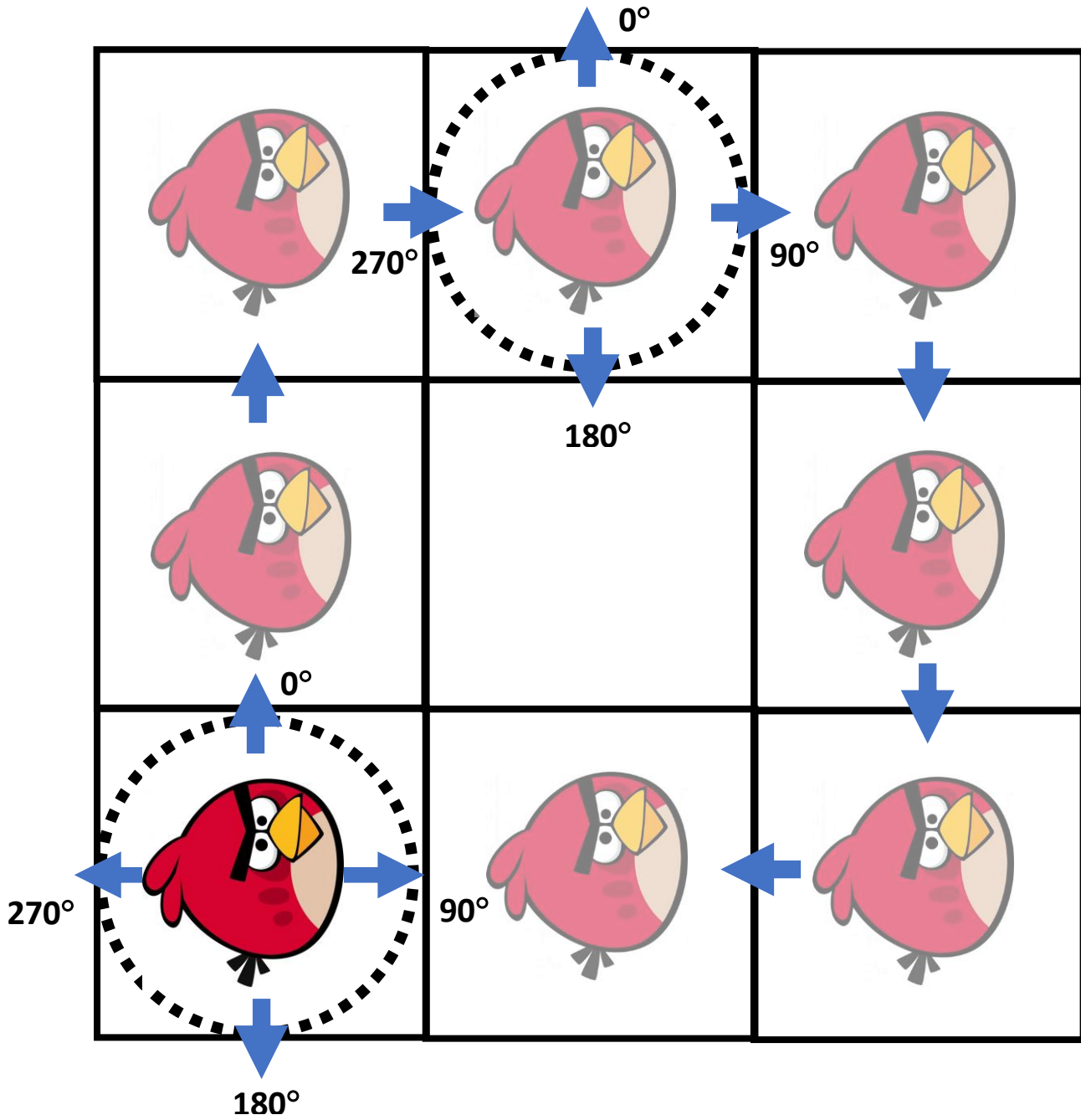
The **direct** part controls the direction Red moves in

The **move** parts are the same so that Red hops the same distance each time

Whichever direction Red is facing at the start becomes 0°



Red doesn't turn when he's coded with Sphero blocks



He shuffles from square to square always facing the same direction

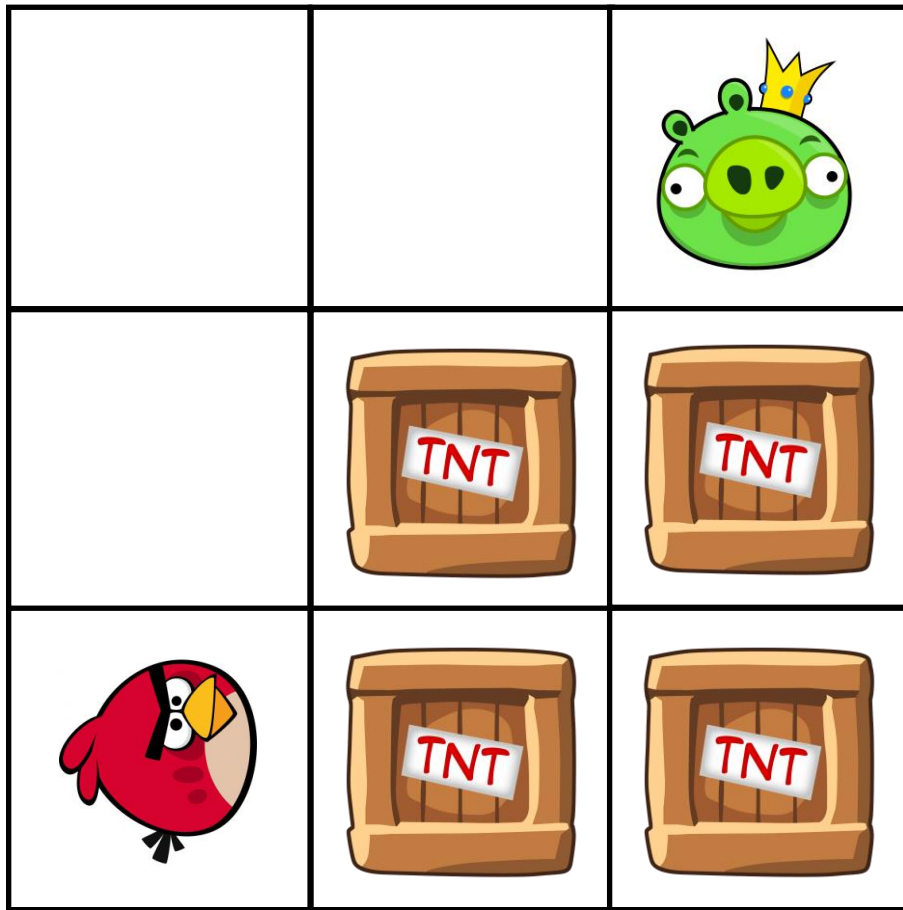
Before setting down the blocks, go over your program using

PSEUDOCODE

Pseudocode is where you discuss the problem with your partner *before* coding the program.

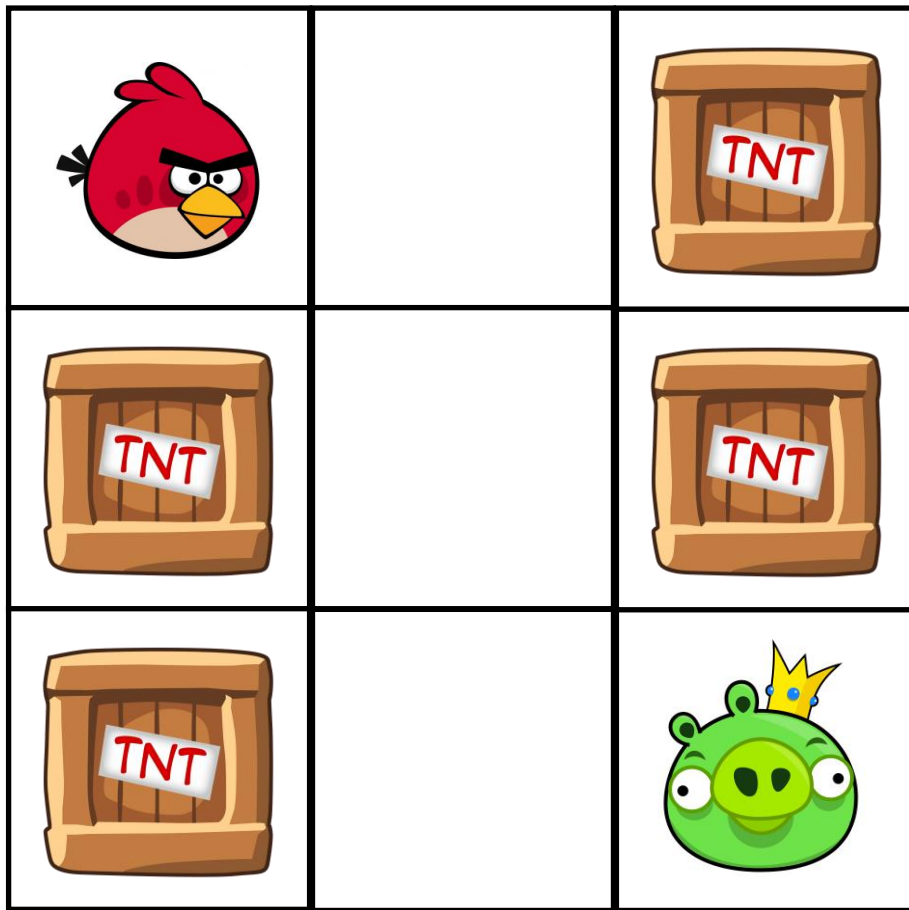


Talking through the problem first can help you solve it faster.
After all, two heads are better than one!



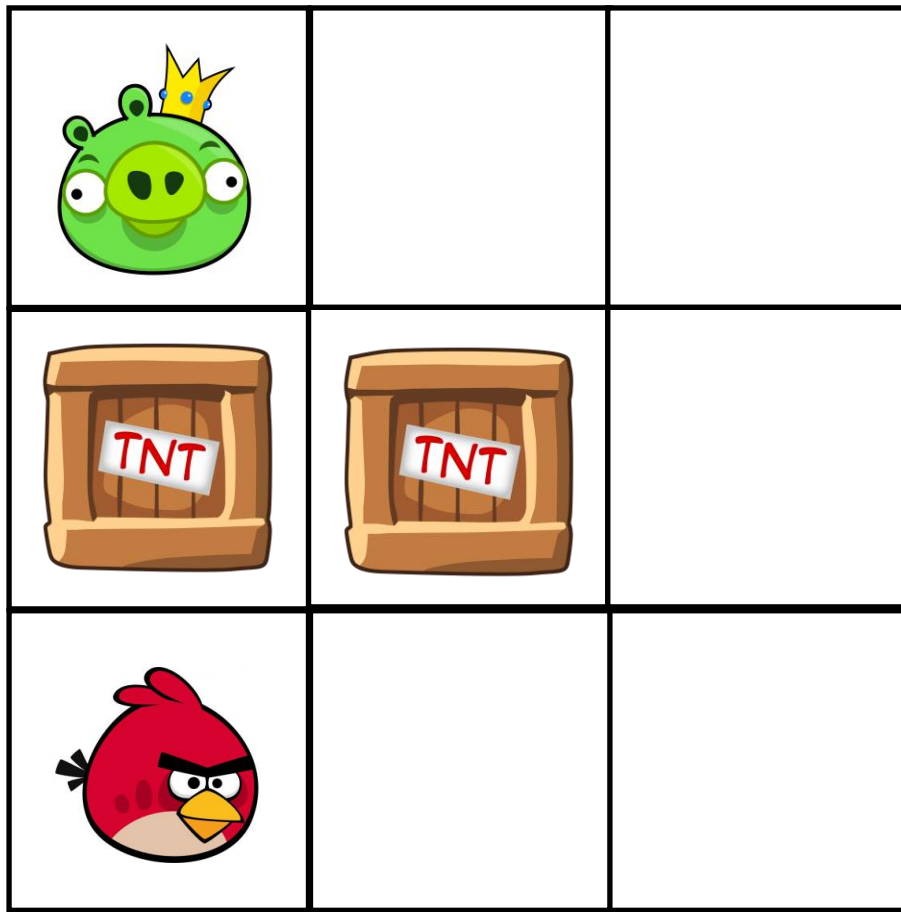
Code.org

Sphero



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Sphero



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