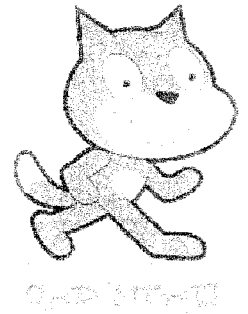Let's look again at the two main things we need to code in our game:

1. moving the explorer
2. reaching centre of the maze (and rescuing the explorer's friend)

The table below shows an **algorithm** for moving the explorer and Scratch **code** that does the same thing.

| Algorithm for moving explorer | Code |
|---|---|
| when the flag is clicked<br><br>   repeat forever<br><br>      if right arrow key is pressed<br>         point right<br>         move 5 steps<br><br>      if left arrow key is pressed<br>         point left<br>         move 5 steps<br><br>      if up arrow key is pressed<br>         point up<br>         move 5 steps<br><br>      if down arrow key is pressed<br>         point down<br>         move 5 steps<br><br>      if explorer touches the same colour as the maze wall<br>         go back to starting position |  |

Algorithms let programmers concentrate on what the program has to do instead of how to do it on the computer. Once the algorithm is worked out, writing the code is easy!

Notice how an algorithm is **indented** to show which parts belong **inside** other parts e.g.

repeat forever
→ if right arrow key is pressed ......... goes inside **repeat forever**
  → point right ................................. goes inside **if right arrow key is pressed**
  → move 5 steps ............................. goes inside **if right arrow key is pressed**

define algorithm -

name _____ class _____ Computer _____
team _____ date _____

## now let us write to help our project move along

| | |
|---|---|
| Write an alogrithm that explains how you start your game | Write an alogrithm for another section of your game |
| What is going on here? | What is going on here? |