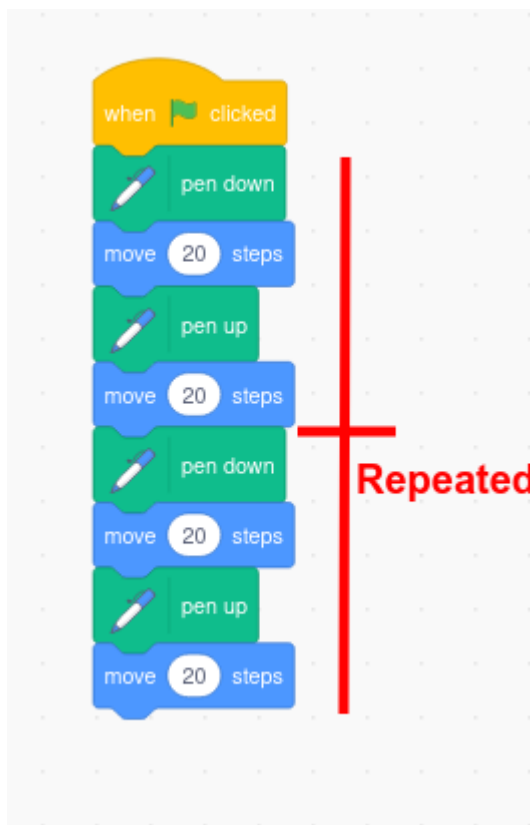# Control: loops

Practical case:

To better understand what repetitions are, we are goint to make a program that draws two dashed lines.
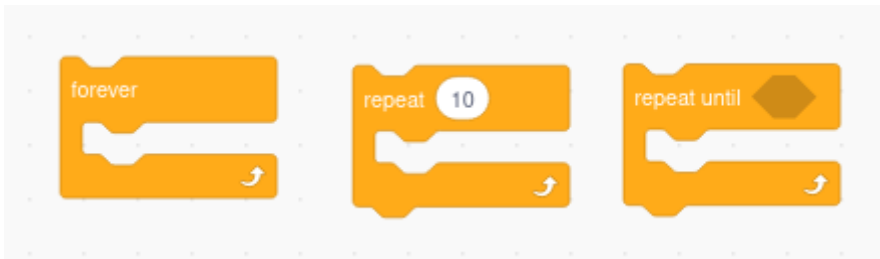

Solution:

You can duplicate the blocks (right click - duplicate) so you don't have to build the same thing twice.

What if you had to paint many lines? That is, repeat the same thing many times. Then you can add a **control** block to do repetitions. Repetitions are also called "**loops**." It is possible to add 3 types of loops:
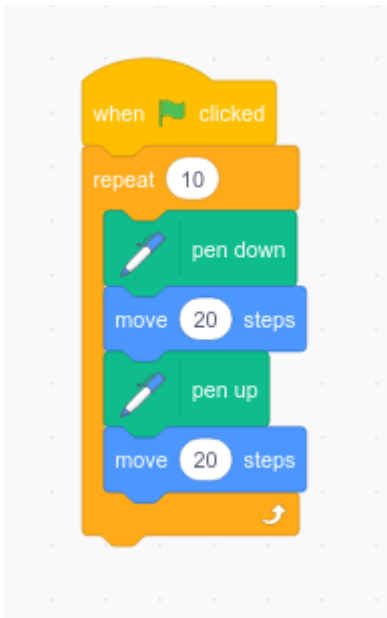
- They repeat themselves constantly, **forever**.
- They are repeated a **specific number** of times
- They repeat until a **condition** is met

Practical case

Create a program with a sprite that draws 10 dashed lines in a row.
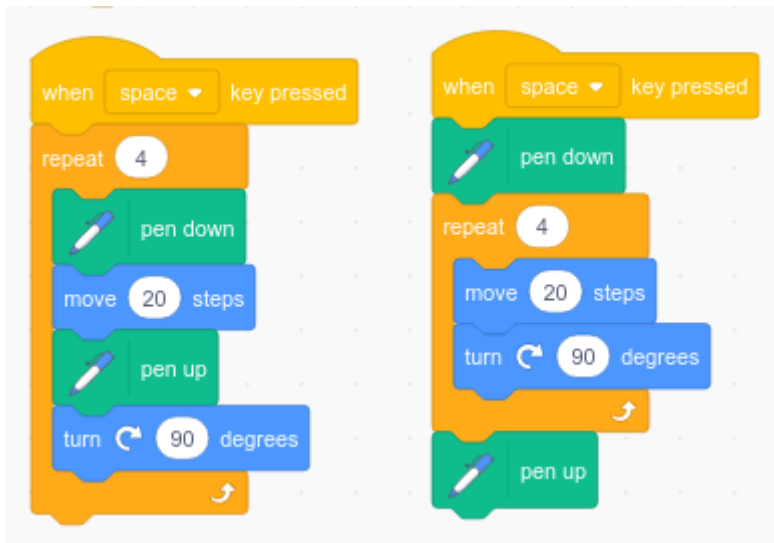
Solution

Practical case

Add a new program, when the space key is clicked to draw a square
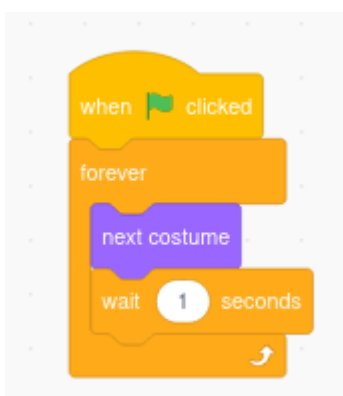

Solution

There are two possible solutions to drawing the square using the block of repetitions. Below are the two possible programs.. The pencil up and down blocks can be inside or outside the repetition block. In this example the result will be the same, although the one on the left is more efficient for code purposes since it does not execute the pencil down and up instructions unnecessarily.

Practical case

*Make the cat change costumes **constantly**. Add a 1 second delay to make the costume change a bit slower.*

Solution

*Finally, save the program with the name **loops.sb3***