

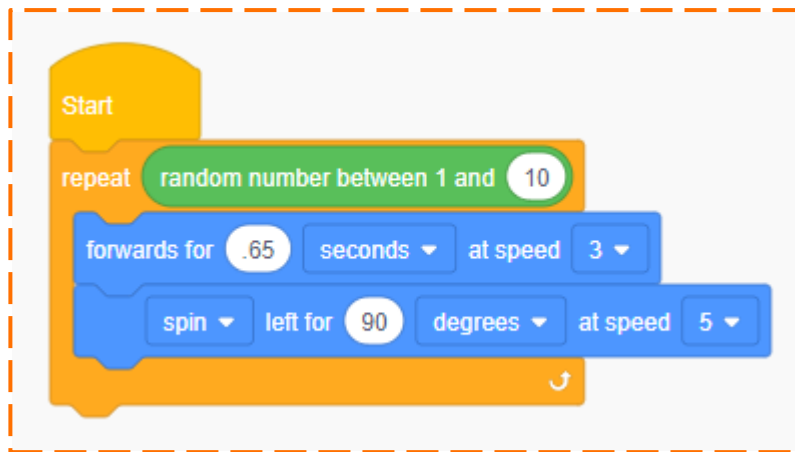
U3-1.1e Change it up: Drive a square?

How many loops does it take to drive in a square? You know that a square has four sides and four angles, so the robot needs to repeat driving and turning four times. That means that if you write a program for Edison to drive in a square using a definite loop, like the **repeat** block, you need to have the loop repeat four times.

What happens if the loop only repeats three times? How about if it repeats nine times?

What to do

Look at this EdScratch program:



This program is using a special input parameter for the **repeat** block: the **random number** block! This block tells Edison to pick a number between 1 and 10 **at random**. That's how many times the robot will loop the code inside the **repeat** block.

Write the program in EdScratch. Download your program to your robot and use activity sheet U3-1 to test your program. Try running the program several times to see what happens.

1. What happened when you ran the program? Did the same thing happen every time? Why or why not?

Sample student answer: The first time I ran the program the robot drove around the square
one full time plus it went 3 more sides, so it looped 7 times. The second time it only made it
halfway around the square, so it only looped 2 times! Different things happen every time
because the number of loops is random, not always 4.

Activity sheet U3-1: Drive a square

