### **Functions**

```
def move_with_beeper():
    move()
    put_beeper()
```

## Loops

```
for i in range(3):
  move()
```

#### Let's make Karel Move!

- ☐ Can we write a function named turn\_right? This will make Karel turn right. (hint we may have done this before!)
- ☐ Can we use a loop to make karel turn right? Let's create a new function turn\_right\_loop.
- ☐ We want to make Karel move forward seven times. Can we use a loop to make Karel do this? Let's create a function move?
- Now we want to make Karel move from one corner of the map to the opposite. see the diagram below. Let's write a function named switch\_corner (hint: can you use move? ? Can you use a loop?).
- Now let's have Karel move around the whole map! Let's write a function named circle which moves around the whole square (hint: can you use switch\_corner?)

```
+-----+
| end |
| |
| |
| |
| |
| |
| start |
```

## Picking up beepers, Conditionals

Using this command karel can pick up a beeper underneath it:

```
pick_beeper()
```

Karel will crash if there isn't a beeper there, though, so you usually want to check first if there is a beeper with a *conditional*:

```
if beepers_present():
   pick_beeper()
```

# Can Karel Clean-up?

First let's load a new world clean\_up\_world. There will be beepers all over the map. Write a function named cleanup which moves around the whole square and picks up any beepers along the way.