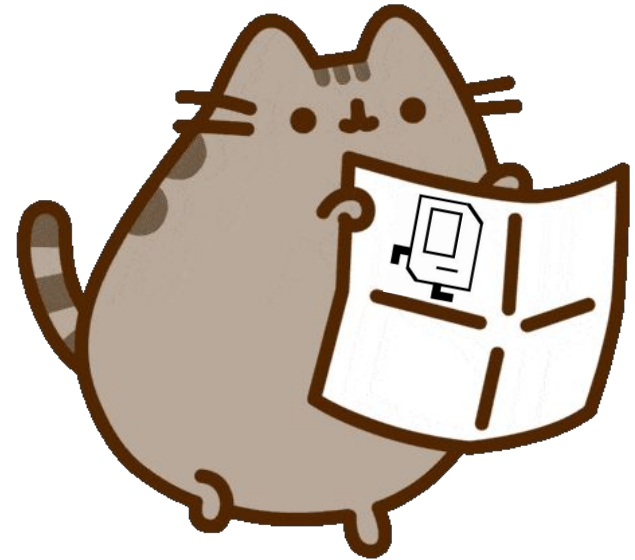


# Karel Reference

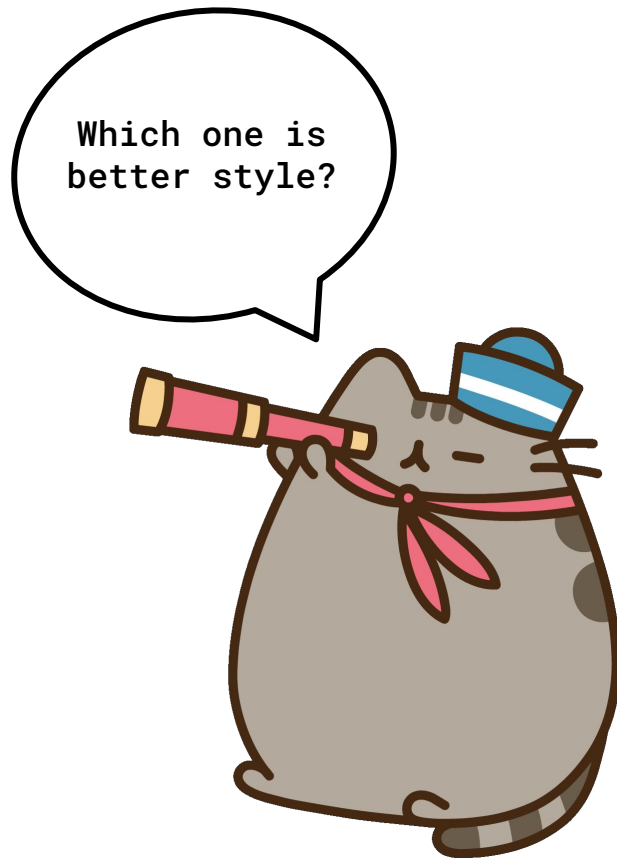
<code>move()</code>	<code>front_is_blocked()</code>
<code>turn_left()</code>	<code>beepers_present()</code>
<code>put_beeper()</code>	<code>left_is_blocked()</code>
<code>pick_beeper()</code>	<code>right_is_blocked()</code>
<code>front_is_clear()</code>	<code>beepers_in_bag()</code>



# Loops

```
# could be any distance to the wall
def move_to_wall():
    while front_is_clear():
        move()

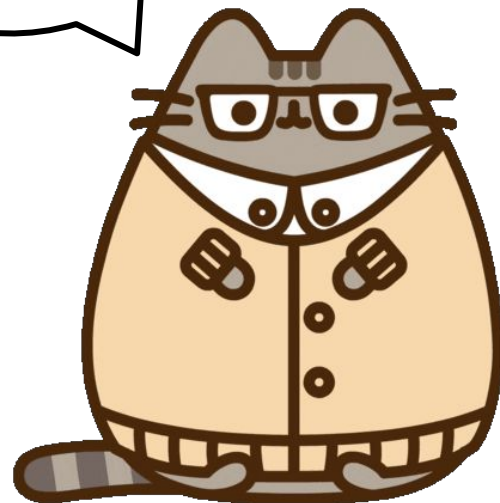
# always 10 moves to the wall
def move_to_wall():
    for i in range(10):
        move()
```



# Control Flow

```
def turn1():  
    if front_is_clear():  
        turn_left()  
    if front_is_blocked():  
        turn_right()  
  
def turn2():  
    if front_is_clear():  
        turn_left()  
    else:  
        turn_right()
```

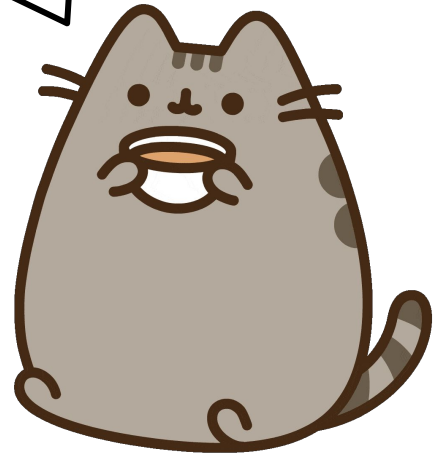
Which one is  
better style?



# Control Flow

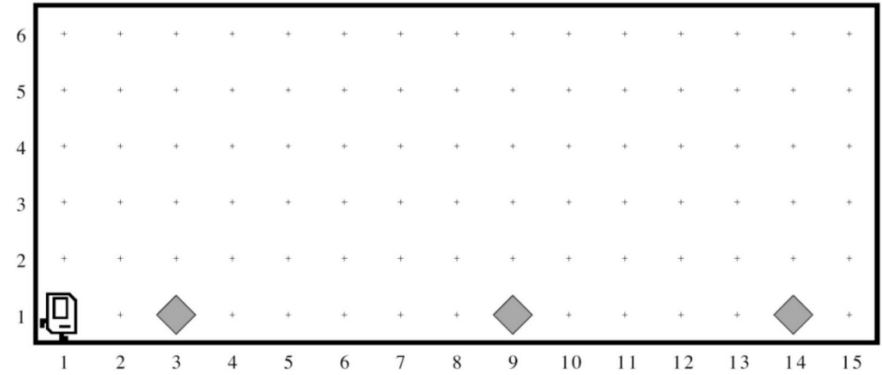
```
def turn1():  
    if front_is_clear():  
        turn_left()  
    if beeper_present():  
        move()  
  
def turn2():  
    if facing_north():  
        turn_left()  
    if not_facing_north():  
        turn_right()
```

Which one can  
be simplified?

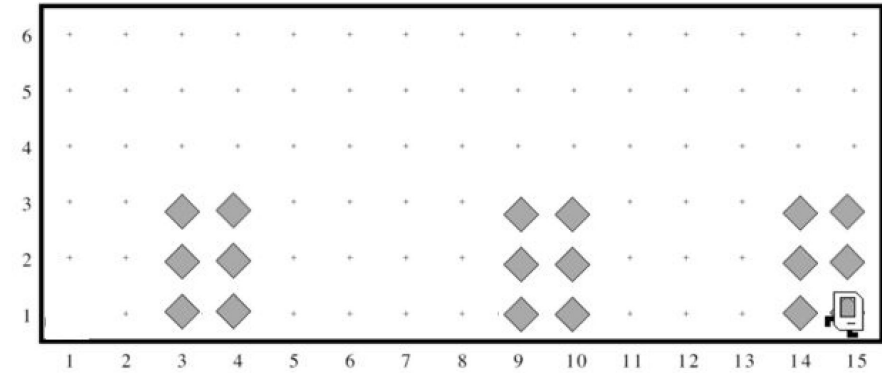


# Section Problem

# Hospital Karel



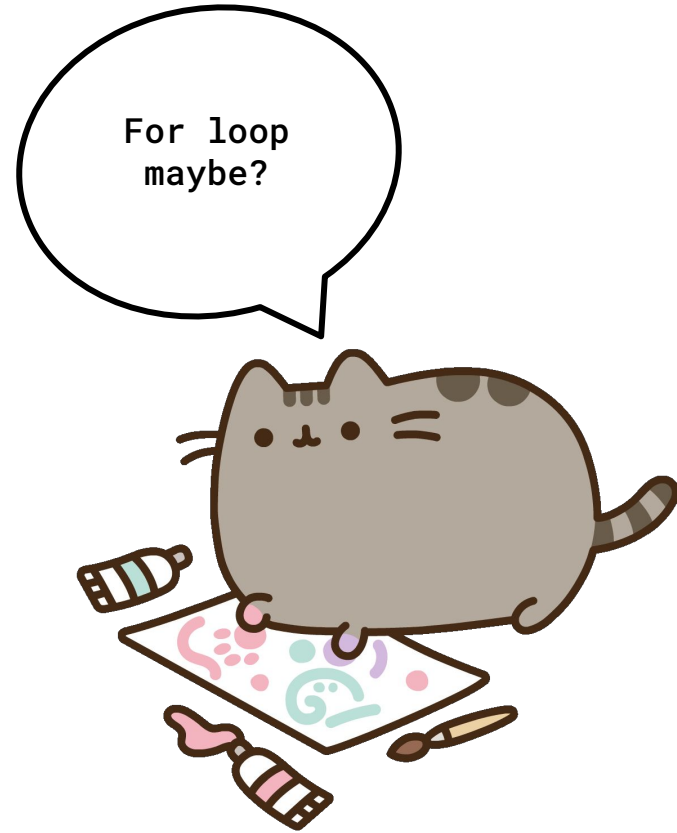
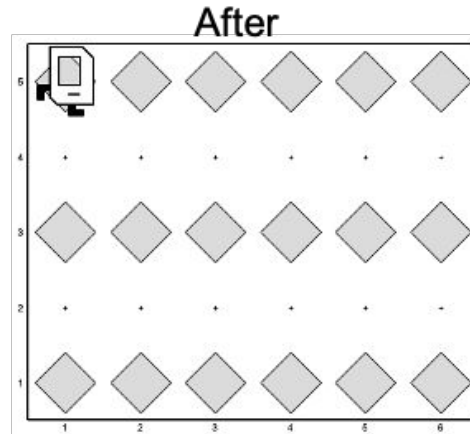
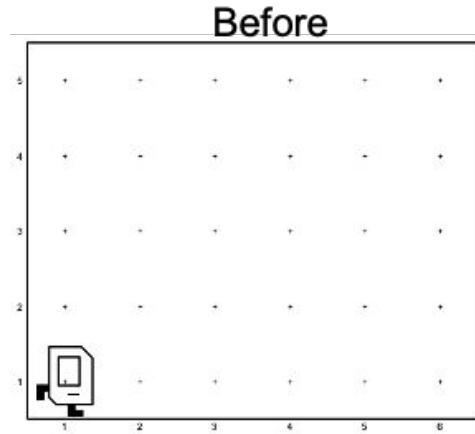
Start



End

# Quickstart

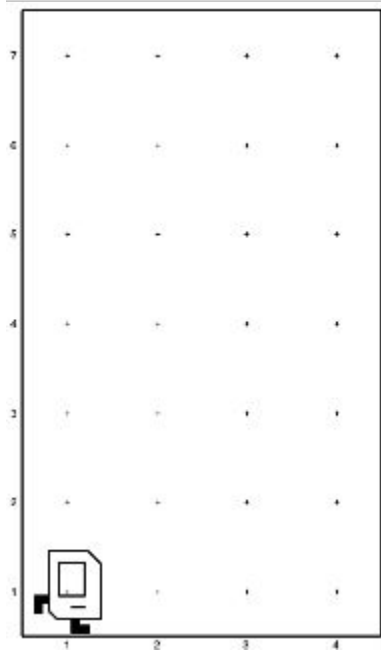
# Stripe Karel



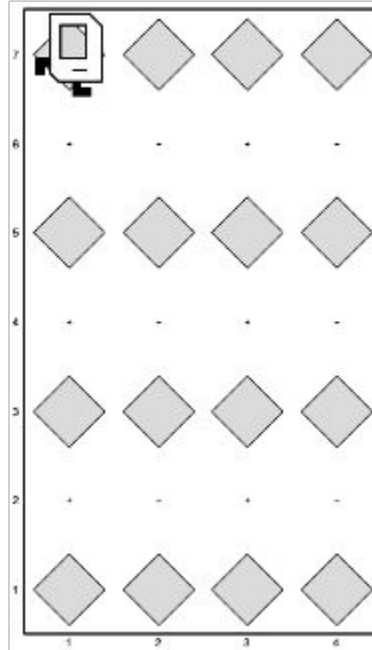


# Stripe Karel

Before



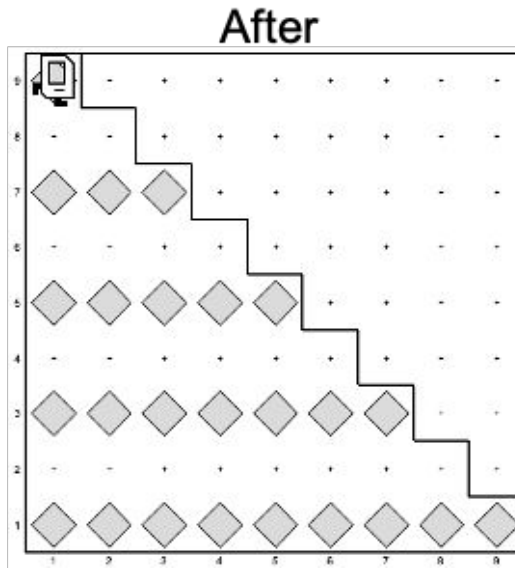
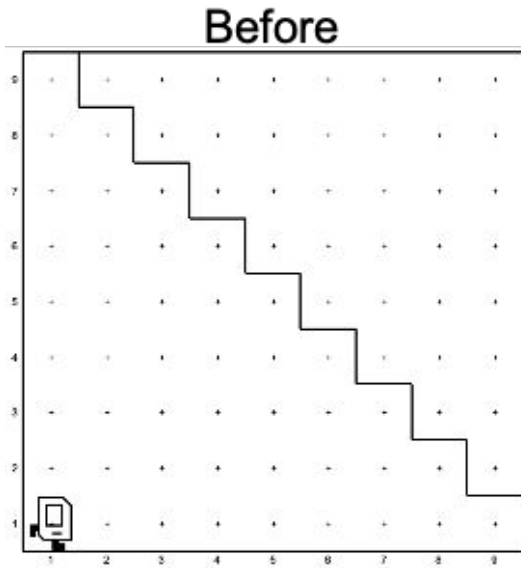
After



Looks decomposable...



# Stripe Karel



Many  
tricky cases



# Project