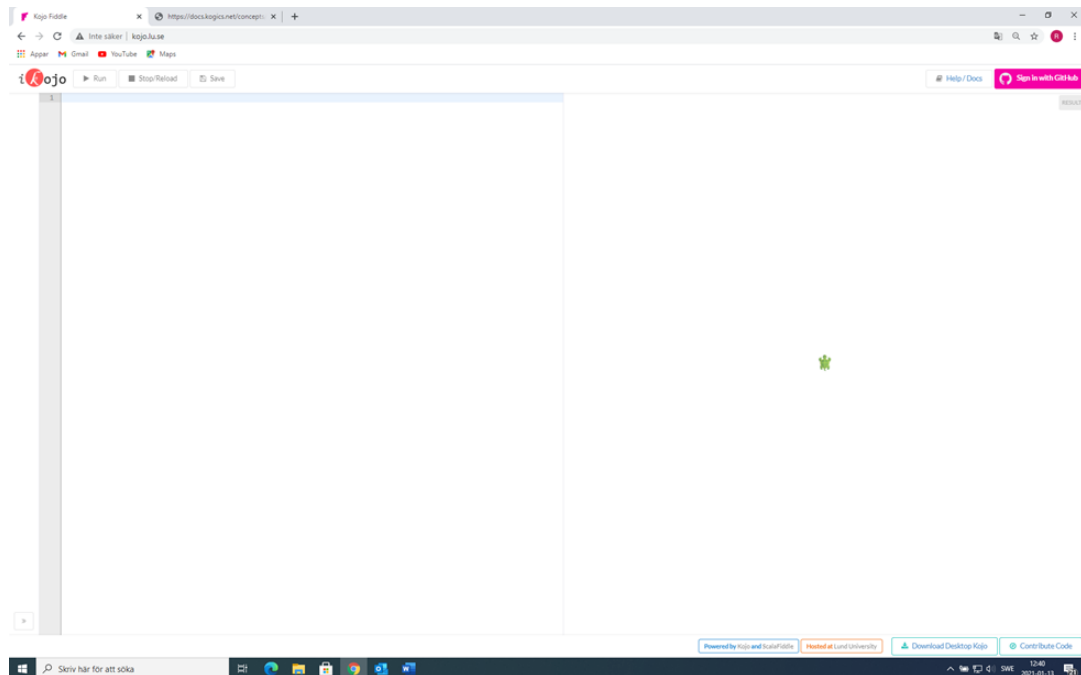# Appendix - workbook - (challenges 1-8)

# Programming with Kojo

Welcome to kojo.

You find a web version at: http://ikojo.in/

## Your first program

Write the following code in the kojo editor window, press the green button and try out!

clear

forward

left

forward

Use the following commands:

**forward; right; left**

challenge 1: make a square

challenge 2: make a stair with several stairsteps

# make a loop

write in the editor:

**repeat (3) { forward; left }**

What happens? Chance your code for a square!

challenge 3: make a stair with 8 stairsteps

challenge 4:make a stair with 12 steps which go down to the left!

challenge 5:      Control your turtle with the following sequence:

| Sequence 1 | Sequence 2 | Sequence 3 (write your own sequence and test) | Sequence 4 (write your own sequence and test) |
|---|---|---|---|
| forward<br>right<br>forward<br>left<br>forward<br>right<br>forward<br>left | backward()<br>right<br>forward<br>forward<br>right<br>backward()<br>left<br>forward<br>forward<br>forward<br>left | | |

simplify the code using the repeat command and test in kojo:

forward; right; right;forward;forward; left;forward;forward;forward; backward() ; backward(); right;forward;forward;forward; right;forward;forward;forward;forward;forward; forward; forward

enter your code directly in kojo: use repeat () { }

forward; repeat(2){right}; repeat(2){forward} …

Do you want to take longer steps with the turtle?

The command forward lets the turtle move 25 steps forward.

forward(100)

the turtle does 100 steps.

A few more commands / Having fun with the turtle:

challenge 7:

write the following code :

<span style="color:red">clear</span>

<span style="color:red">forward (100)</span>
<span style="color:red">circle (50)</span>
<span style="color:red">hop(200)</span>
<span style="color:red">write(" your name ")</span>

challenge 8:

Now draw a picture of your choice, maybe a car or a face or something else.
Use the different commands you learned before.