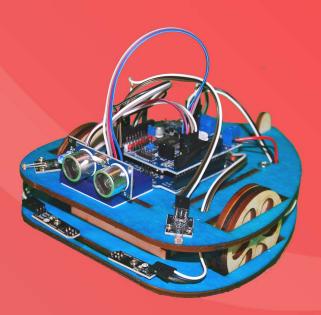
Leaphy Original Solutions

Leaphy Easyblogs software





SPOILER ALERT

Tried everything and nothing works?

When Leaphy keeps doing crazy things.

When the whole class is already one level further.

When you're getting a little discouraged.

Then there is this booklet with ready-made solutions.

Feel free to copy them, but also force yourself to understand the solution.

And if it works, experiment with it a bit. Just adjust the blocks. Add something. Take something away. In this way you'll work on a good basis for the next level.

Also check out the Leaphy forum for tips and tricks! forum.leaphy.nl

Good luck and have fun!

The team of the Leaphy . Foundation

Robot design Leaphy Original: Olivier van Beekum, Vroukje van der Vliet & Hannah Kersbergen

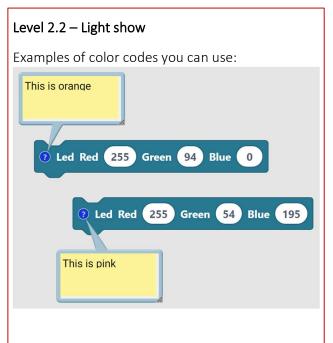
Teaching material - concept and elaboration: Roeland Smith

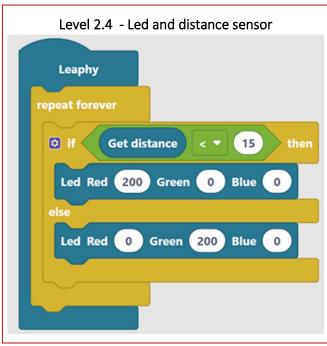
Translation: Nora van Wassenaer, Olivier van Beekum and Tracy Nkongolo

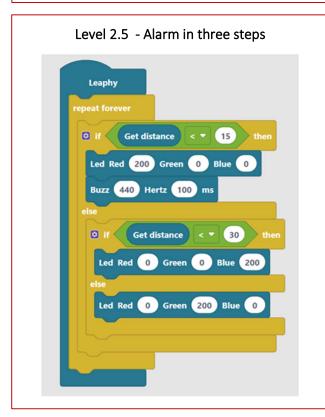
Sixth edition – March 2022 © Stichting Leaphy

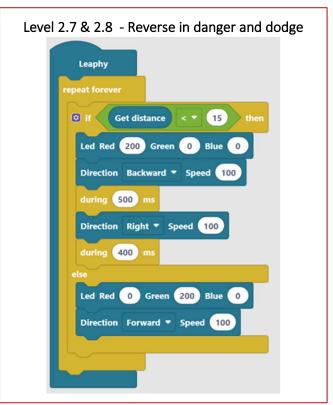


Level 2 - Shine & Drive - Solution



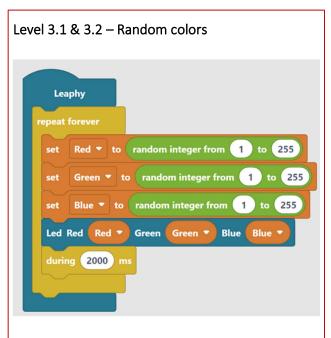


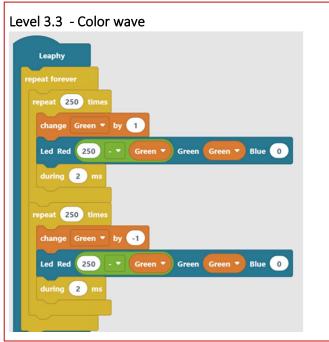


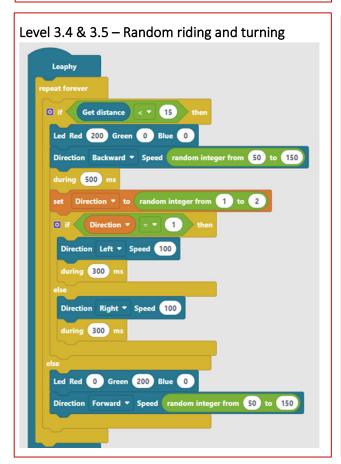


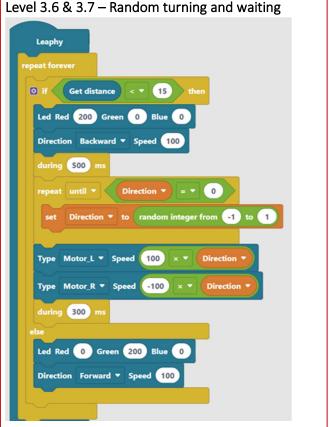


Level 3 - Robot with character - Solution











Level 4 - Line followers - Solution

Level 4.9 — Four situations with led colors Leaphy repeat forever O if Read digipin 14 * * 1 and * Read digipin 15 * * 1 then Led Red 40 Green 70 Blue 80 O if Read digipin 14 * * 1 and * Read digipin 15 * * 0 then Led Red 200 Green 0 Blue 0 O if Read digipin 14 * * 0 and * Read digipin 15 * * 1 then Led Red 0 Green 0 Blue 200 Led Red 0 Green 0 Blue 200 Led Red 0 Green 0 Blue 200 Led Red 0 Green 0 Blue 200

Level 4.10 - Follow the line 3

This program only works if you have a black crossline in your line. The fourth If-Then block counts the rounds when crossing this crossline. The 5 milliseconds ensure that only 1 is added with each round and that Leaphy completely crosses the line. With this length of time you have to experiment a bit yourself to see what works best.

```
repeat forever

set SL v to Read digipin 14 v

set SR v to Read digipin 15 v

① if SL v = v 1 and v SR v = v 1 then

Direction Forward v Speed 100

② if SL v = v 1 and v SR v = v 0 then

Direction Right v Speed 100

③ if SL v = v 0 and v SR v = v 1 then

Direction Left v Speed 100

③ if SL v = v 0 and v SR v = v 0 then

change Turn v by 1

Direction Forward v Speed 100

Direction Forward v Speed 100
```



Level 5 – Light sensors - Solution

```
Level 5.6 – Leaphy light sensitive

Leaphy

repeat forever

G if Read anapin A2 

O or Read anapin A3 

O then

Direction Forward 

Speed 125

else

Direction Forward 

Speed 0
```

```
Leaphy

repeat forever

Direction Forward Speed Read anapin A0 T ÷ T 10 x T 2
```

```
Leaphy

repeat forever

O if Read anapin A2 

Read anapin A3 

then

Type Motor L 

Speed 100

Type Motor L 

Speed 175

else

Type Motor R 

Speed 175

Type Motor R 

Speed 100
```



Level 6 – Line train - Solution

```
Leaphy
repeat forever
 set SL ▼ to Read digipin 14 ▼
 set SR ▼ to Read digipin 15 ▼
 ② if Get distance < ▼ 10 then
  set S ▼ to 0
  Led Red 150 Green 0 Blue 0
  set S ▼ to 100
  Led Red 0 Green 150 Blue 0
 if SL v = v 1 and v SR v = v 1 then
  Direction Forward ▼ Speed S ▼
 if SL = 1 and SR = 0 then
  Direction Right ▼ Speed 100
 ① if ( SL ▼ ) = ▼ (0 ) and ▼ ( SR ▼ ) = ▼ (1)
  Direction Left ▼ Speed 100
 \odot if \langle SL \nabla \rangle = \nabla \langle 0 \rangle and \nabla \langle SR \nabla \rangle = \nabla \langle 0 \rangle then
  Direction Forward ▼ Speed 0
```



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