

Exercise 4: Digitizing The Physical World

The LiFi-project

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i Great, you're ambitious and want to see what's awaiting you in this exercise! But you are ahead of your time - please check back later.

OVERVIEW

In the fourth exercise of the LiFi-project ...

Here are the relevant lessons of the online script. Make sure you study them carefully in order to solve this exercise:

- [10 - Sensing Light](#)
- [11 - The Color Sensor](#)
- [12 - Digitization](#)

Good Luck!

YOUR TASKS

To pass this exercise, you must complete the following tasks and submit your results via [ILIAS](#). You find the details on the form of submission below.

1. ...

2. ...

3. ...

SUBMISSION

For this exercise, please submit:

- ...
- ...
- ...

Submit all files via the corresponding exercise in [ILIAS](#).

MORE EXERCISES TO PRACTICE

The following tasks are for you to practice your skills. They are optional and not part of the submission.

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MORE QUESTIONS TO PRACTICE

Try to answer the following questions to practice your understanding of the topics around the LiFi-project. The questions are optional and not part of the submission.

- In an image with a resolution of 800x600 pixels and using 24-bit color depth, calculate:
 - a. The number of bits needed to store the image.
 - b. The number of bytes needed to store the image.
 - c. The number of kilobytes or megabytes needed to store the image.