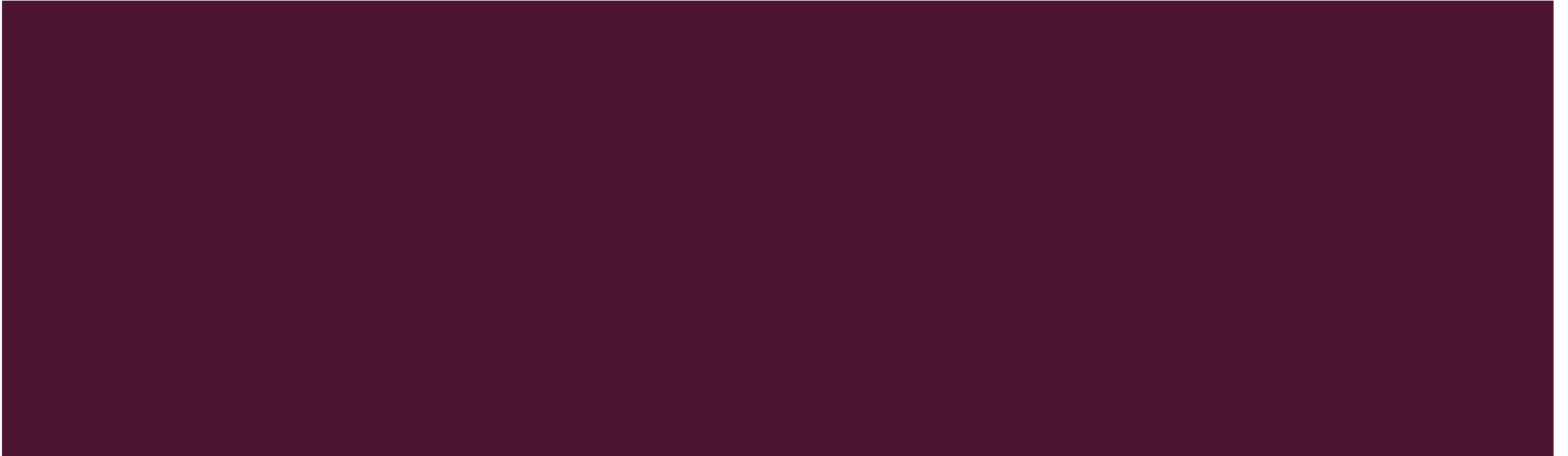




MIT

MODERNE INFORMATIONSTECHNOLOGIEN

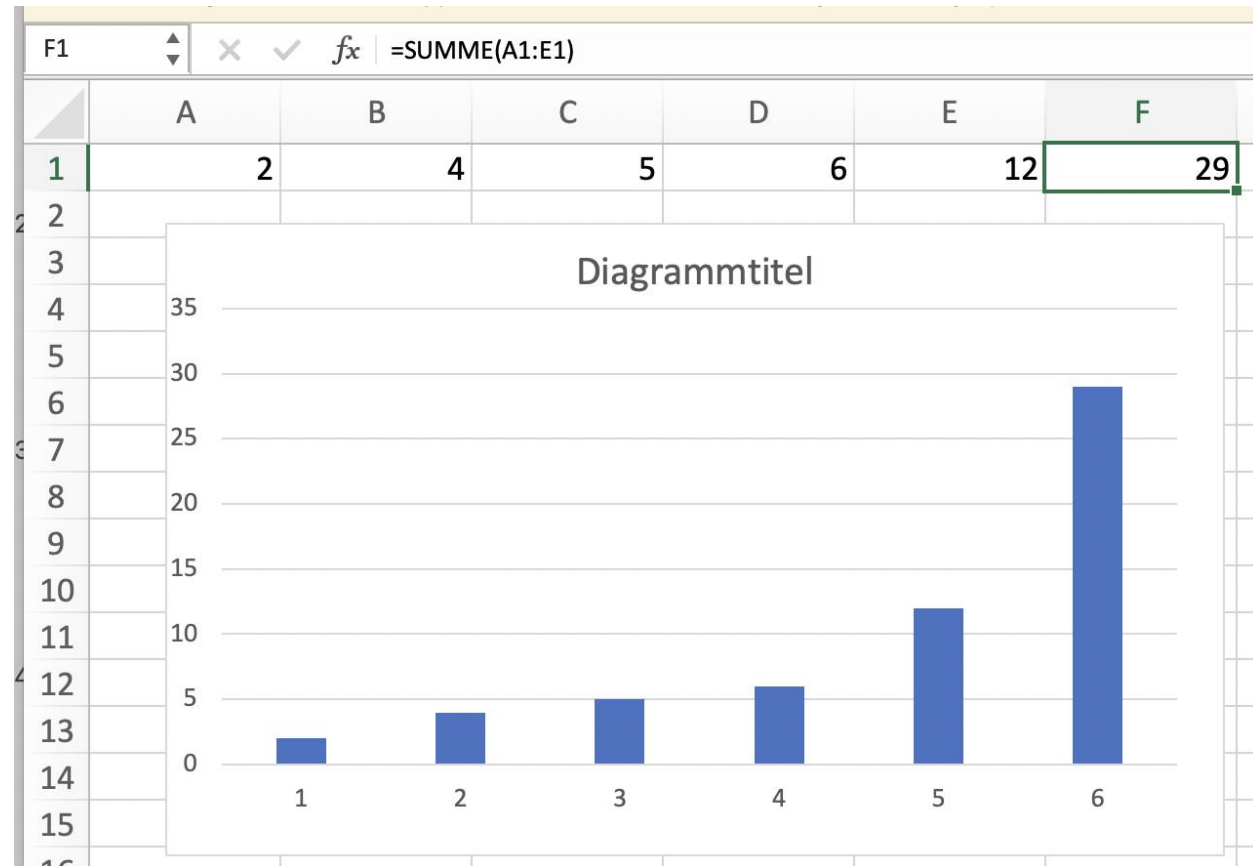


INHALTSVERZEICHNIS

- Excel
- HTML & Javascript
- LegoMindstorms
- LogikSim
- Vorträge zu Informatik-Themen
- Mikrocontroller-Programmierung
- Python

EXCEL

- Handhabung
- Mathematische Funktionen
- Komplexere Aufgabenstellungen



HTML & JAVASCRIPT

- Grundlagen des Umgang mit HTML & Javascript
- Erstellung eigener Websites

```
25
26 </head>
27 <body class="mediawiki ltr sitedir-ltr capitalize-all-nouns ns-0 ns-subject page-HTML_Tutorials rootpage-HTML skin-selfhtml action-view">
28   <div id="mw-page-base" class="noprint"></div>
29   <div id="mw-head-base" class="noprint"></div>
30   <div id="content" class="mw-body" role="main">
31     <a id="top"></a>
32
33     <div class="mw-indicators">
34 </div>
35     <h1 id="firstHeading" class="firstHeading" lang="de-formal">HTML/Tutorials</h1>
36     <div id="bodyContent" class="mw-body-content">
37       <div id="siteSub">Aus SELFHTML-Wiki</div>
38       <div id="contentSub"><span class="subpages">&lt;&lt; <a href="/wiki/HTML" title="HTML">HTML</a></span></div>
39         <div id="jump-to-nav" class="mw-jump">
40           Wechseln zu:
41             <a href="#mw-head">Navigation</a>,
42             <a href="#p-search">Suche</a>
43         </div>
44       <div id="mw-content-text" lang="de-formal" dir="ltr" class="mw-content-ltr"><div class="floatright"><a href="/wiki/Datei:HTML5_Logo.svg" cl
45 <div class="visualClear"></div>
46 <ol><li> <a href="/wiki/HTML/Tutorials/Entstehung_und_Entwicklung" title="HTML/Tutorials/Entstehung und Entwicklung"><b>Entstehung und Entwicklung</b></a>
47 <ul><li> HTML als Auszeichnungssprache</li>
48 <li> Semantik</li>
49 <li> HTML5</li></ul></li>
50 <li> <a href="/wiki/HTML/Tutorials/Element,_Tag_und_Attribut" title="HTML/Tutorials/Element, Tag und Attribut"><b>Element, Tag und Attribut</b></a>
51 <ul><li> Unterschied Tag und Element</li>
52 <li> optionale Tags</li>
53 <li> Attribute</li></ul></li>
54 <li> <a href="/wiki/HTML/Tutorials/Grundger%C3%BCst" title="HTML/Tutorials/Grundgerüst"><b>Grundgerüst</b></a></li>
55 <li> <a href="/wiki/HTML/Tutorials/Seitenstrukturierung" title="HTML/Tutorials/Seitenstrukturierung"><b>Seitenstrukturierung</b></a>
56 <ul><li> header, footer &amp; nav</li>
57 <li> main</li>
58 <li> article, section &amp; aside</li></ul></li>
59 <li> <a href="/wiki/HTML/Tutorials/Textstrukturierung" title="HTML/Tutorials/Textstrukturierung"><b>Textstrukturierung</b></a>
60 <ul><li> Absätze</li>
61 <li> Inhalt gruppieren mit
62 <ul><li> blockquote</li>
```

LEGOMINDSTORMS

- Legoroboter bauen
- Legoroboter programmieren

The screenshot displays the LEGO Mindstorms software interface, which is used for programming LEGO Mindstorms robots. The interface is divided into two main sections: a block palette on the left and a workspace on the right.

Block Palette (Left):

- Display:** Contains blocks for displaying text on the robot's LCD screen, such as "display Eyes / Neutral for 2" and "write EV3 at line 1".
- MOTORS:** Contains blocks for controlling the robot's motors, such as "run clockwise for 1 rotations".
- MOVEMENT:** Contains blocks for moving the robot, such as "move forward for 1 rotations".
- SOUND:** Contains blocks for playing sounds and beeps, such as "play sound Communication / Hello" and "play beep 60 for 0.2 seconds".
- EVENTS:** Contains blocks for setting status lights, such as "set status light to green".
- OPERATORS:** Contains blocks for starting and stopping sounds, such as "start playing beep 60".
- VARIABLES:** Contains blocks for playing beeps, such as "play beep 60 for 0.2 seconds".
- MY BLOCKS:** Contains blocks for stopping all sounds, such as "stop all sounds".

Workspace (Right):

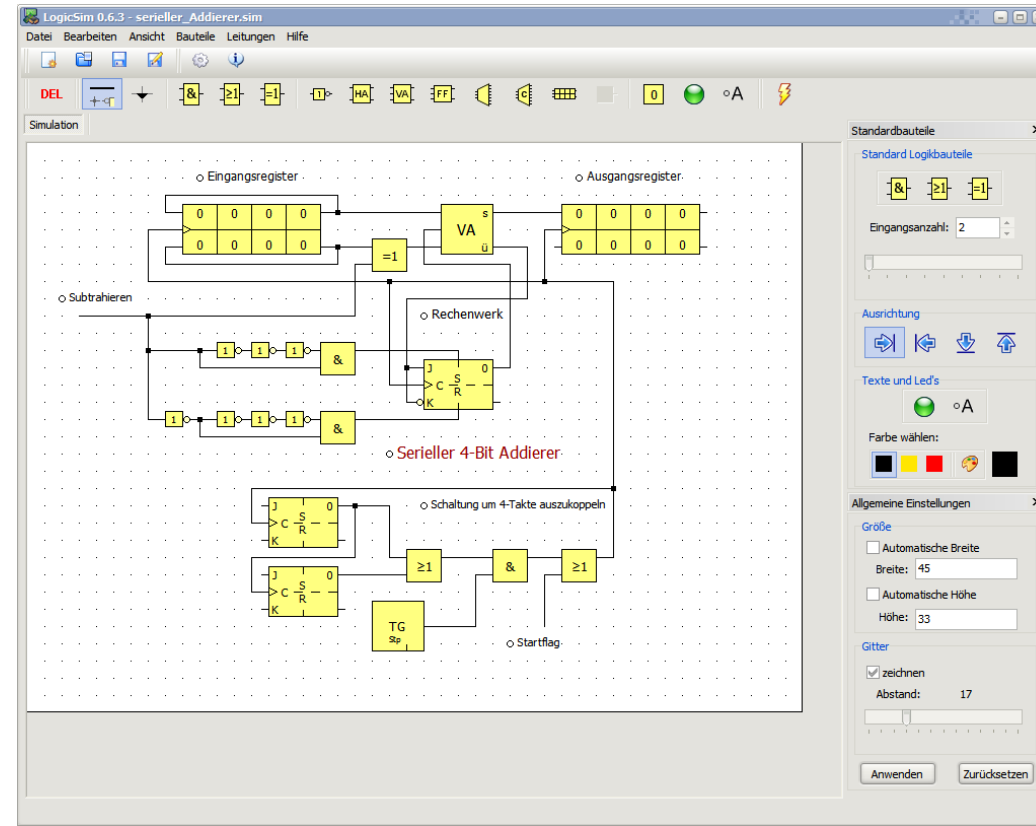
The workspace shows a sequence of blocks connected to a "when program starts" trigger block. The sequence is as follows:

- when program starts
- run clockwise for 1 rotations
- move forward for 1 rotations
- display Eyes / Neutral for 2 seconds

The interface also includes a "connect" button at the top right and a "ALL CODEBLOCKS" dropdown at the bottom left. The workspace has a grid background and a toolbar at the bottom with zoom and navigation icons.

LOGIKSIM

- Logikschaltungen
- Simulation in Programm
- Komplexere Schaltungen möglich
- Stromfluss erkennbar
- Tieferer Einblick

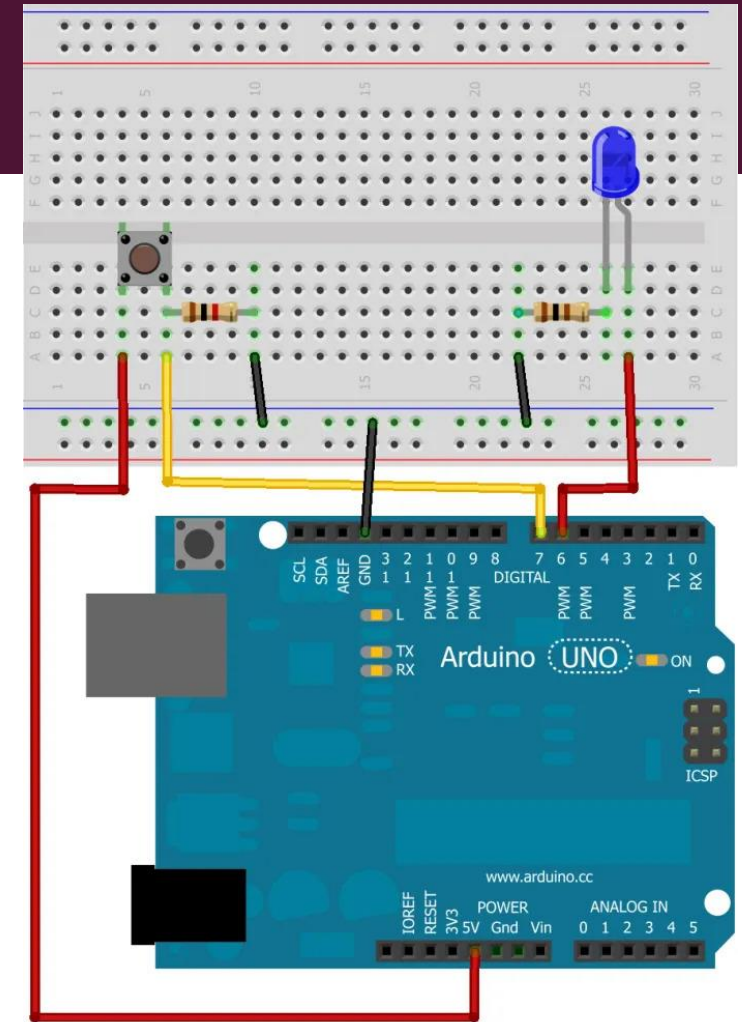


VORTRÄGE ZU INFORMATIKTHEMEN

- Vorträge ausarbeiten in Teamarbeit
- Vorträge nach bestimmten Anforderungen erstellen
- Vorträge präsentieren
- Themen zB: Computerviren, Computerspiele

MIKROCONTROLLER PROGRAMMIERUNG

- Praktische Fortführung von LogikSim
- Mikrocontroller Baukasten
- Programmierung mit Embedded C
- Nachbau verschiedener Schaltungen
- Eigenständiges Projekt



PYTHON

- Einführung in Python Programmierung
- Erlernen grundlegender Strukturen
- Turtle Grafik

```
1 from turtle import *
2 makeTurtle()
3 right(90)
4 forward(52)
5 left(90)
6 repeat 4:
7     forward(40)
8     left(45)
9 left(90)
10 forward(52)
```