

# Inhaltsverzeichnis

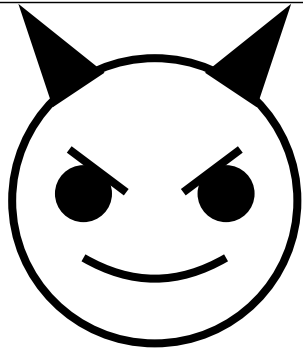
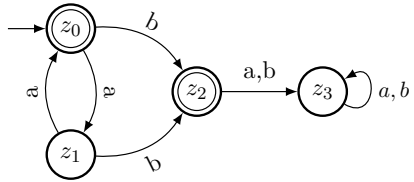
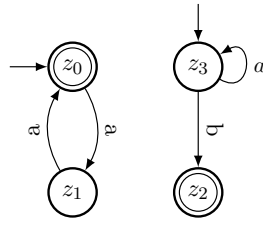
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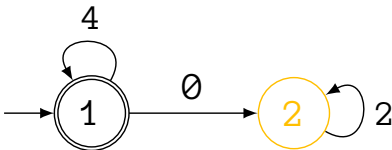
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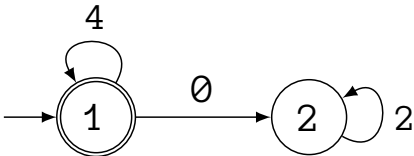
Pfad	Ergebnis
Allerlei/Teufel	
Automat/AutomatDFA	<p>Deterministic Finite Automaton</p>  $D = \left( \begin{array}{ccccc} \text{Zustände} & \text{Eingabe} & \text{Übergangsfkt.} & \text{Start(s)} & \text{Endzust.} \\ Z & \Sigma & \delta & S & E \\ \text{Menge} & \text{Alphabet} & Z \times \Sigma \rightarrow Z & \in Z & \subseteq Z \end{array} \right)$ $T(D) = \{x \in \Sigma^* \mid \hat{\delta}(S, x) \cap E \neq \emptyset\}$
Automat/AutomatNFA	<p>Nondeterministic Finite Automaton</p>  $N = \left( \begin{array}{ccccc} \text{Zustände} & \text{Eingabe} & \text{Übergangsfkt.} & \text{Start(s)} & \text{Endzust.} \\ Z & \Sigma & \delta & S & E \\ \text{Menge} & \text{Alphabet} & Z \times \Sigma \rightarrow Z^* & \subseteq Z & \subseteq Z \end{array} \right)$ $T(N) = \{x \in \Sigma^* \mid \hat{\delta}(S, x) \cap E \neq \emptyset\}$

		1 a	2 b	3 c	4 c
T[1,j]	1	A	B	CE	CE
T[2,j]	2	D	-	E	
T[3,j]	3	S	-		
T[4,j]	4	S			

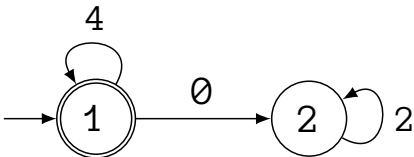
Automat/CYKAlgorithmus



Automat/Demo-1



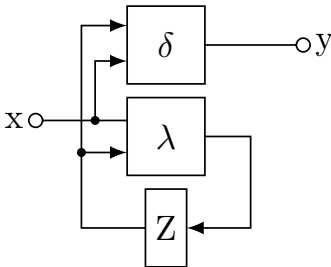
Automat/Demo-2



Automat/Demo

Isch bin a Hädder!

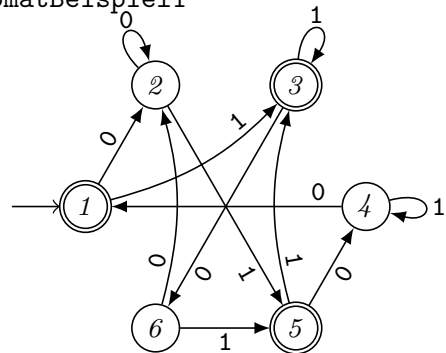
Automat/Header



Ausgabe von Zustand & Eingabe abhängig

Automat/MealyAutomat

Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel1




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2					
3					
4					
5					
6					
	1	2	3	4	5

Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel2

---

2	0				
3		0			
4	0		0		
5		0		0	
6	0		0		0
	1	2	3	4	5

Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel3

2	0				
3		0			
4	0	1	0		
5		0		0	
6	0		0	1	0

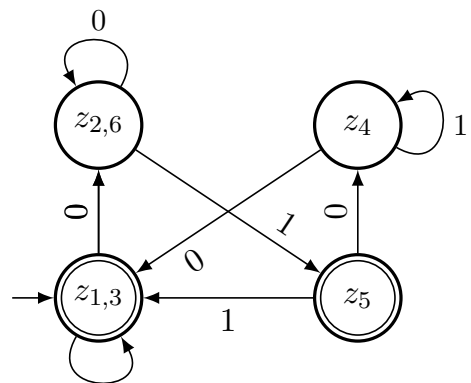
Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel4

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2	0				
3		0			
4	0	1	0		
5	2	0	2	0	
6	0		0	1	0

Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel5

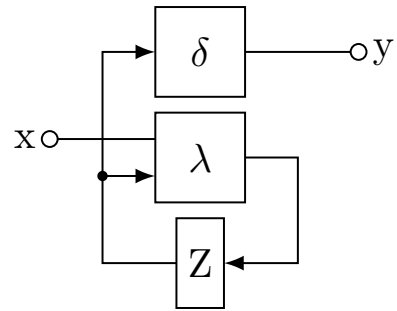
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Automat/Minimalautomat-Beispiel/MinimalautomatBeispiel6

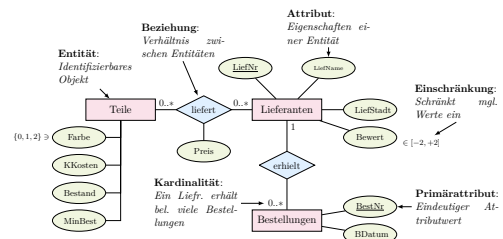
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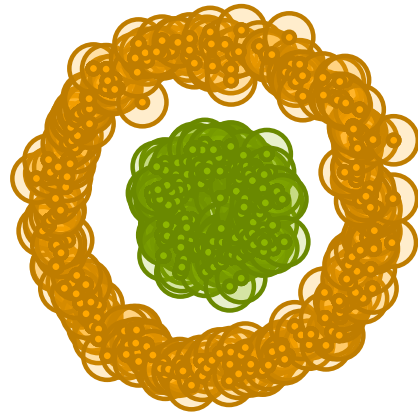


Automat/MooreAutomat

Ausgabe nur vom Zustand abhängig

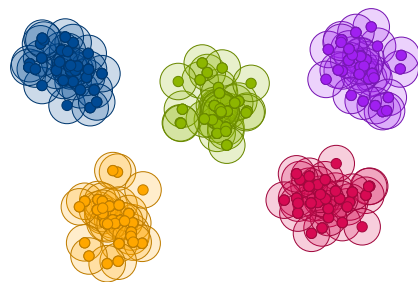


Datenbanken/ERExample



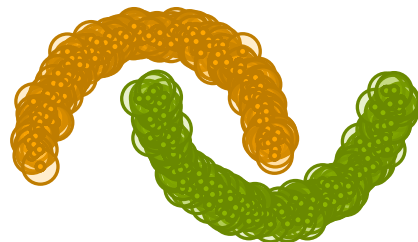
Eigene/Proseminar/Cluster/en-circles

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Eigene/Proseminar/Cluster/en-clusters

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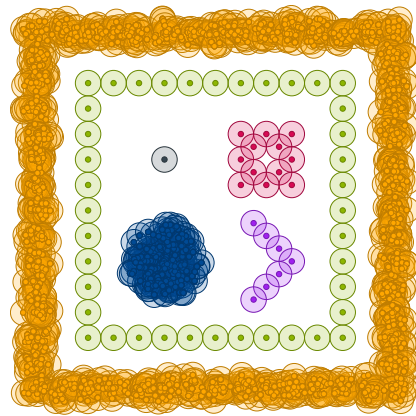


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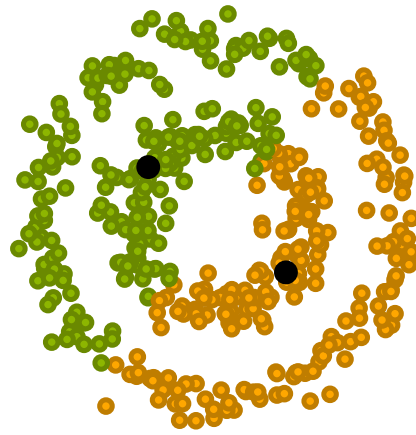
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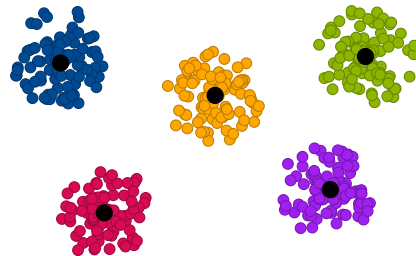
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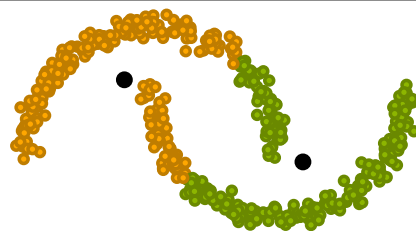
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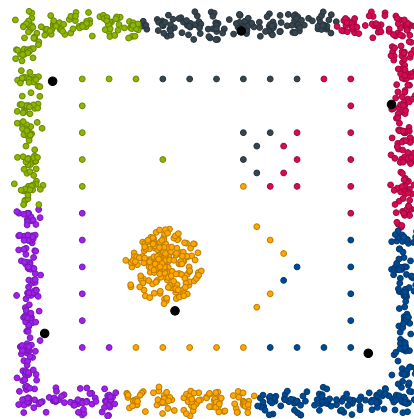
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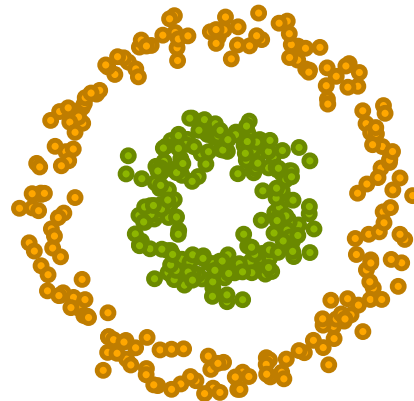
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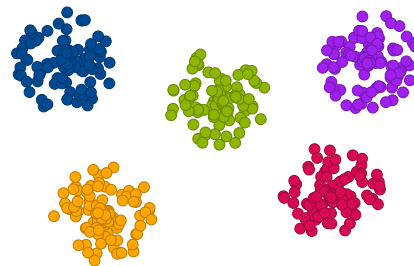
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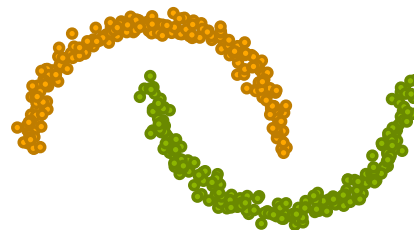
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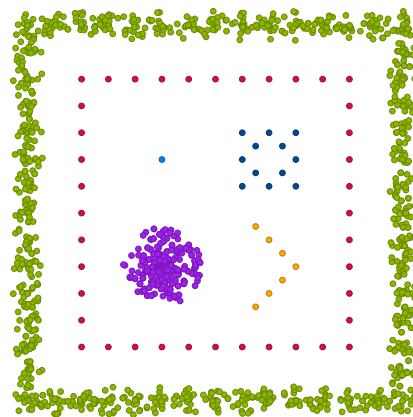
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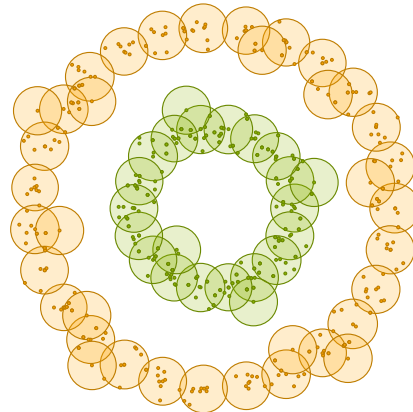
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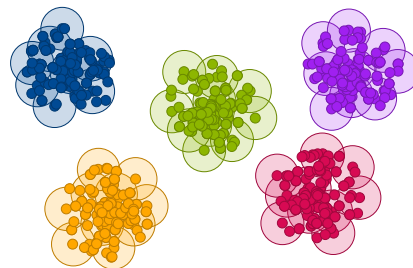
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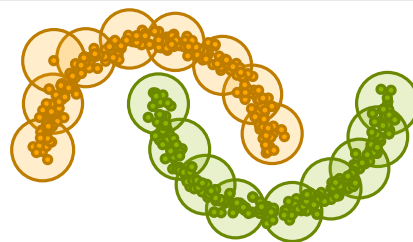
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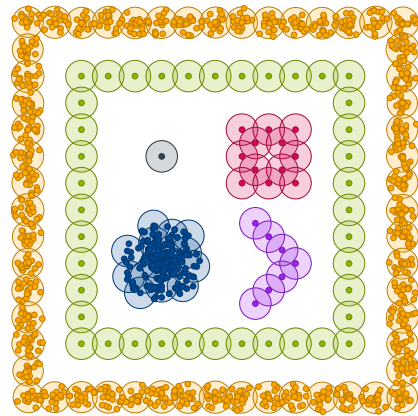
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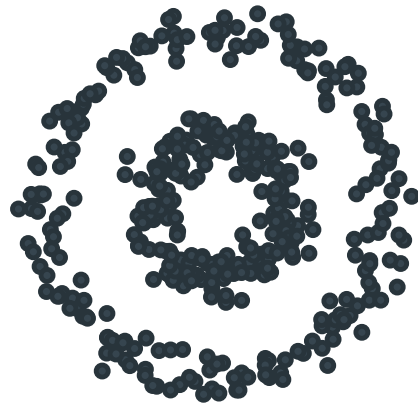
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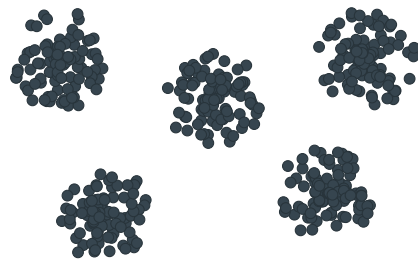
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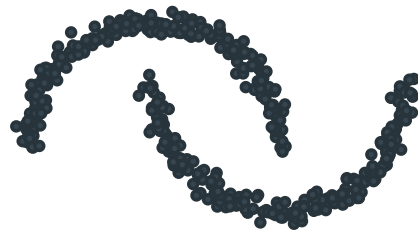
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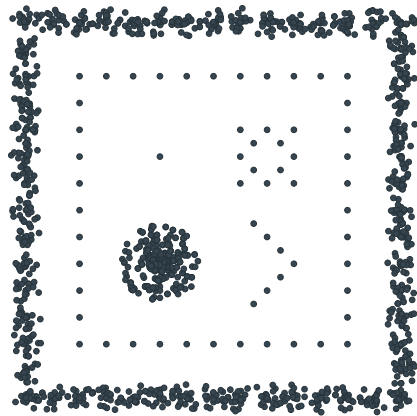
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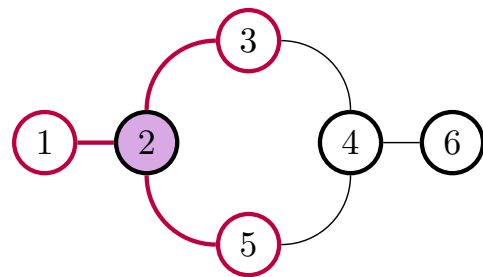
Eigene/Proseminar/Cluster/thumb-moons  
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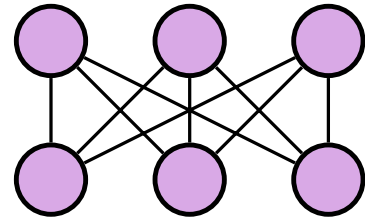
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Graphen/GraphNachbarschaftGrad

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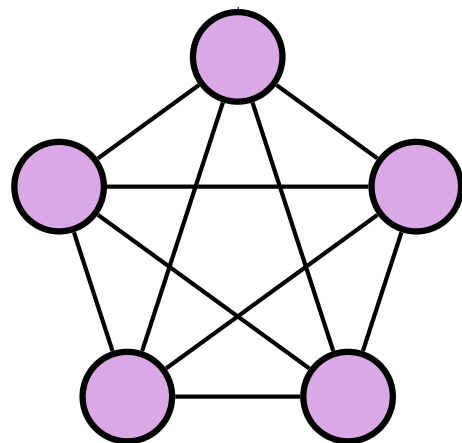
$K_{3,3}$



Graphen/GraphNichtPlanarK33

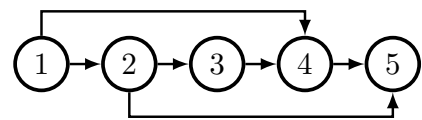
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$K_5$



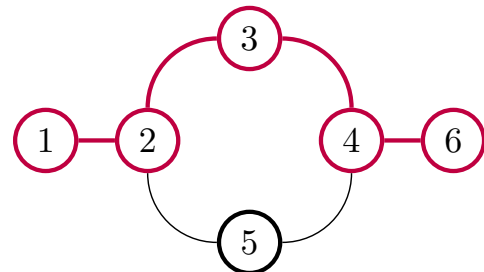
Graphen/GraphNichtPlanarK5

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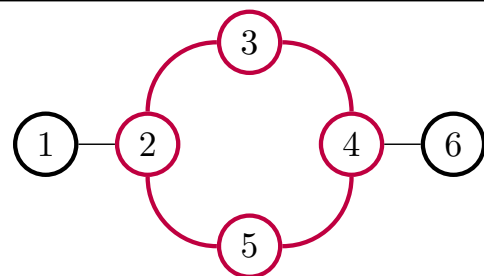
Graphen/GraphTopologie

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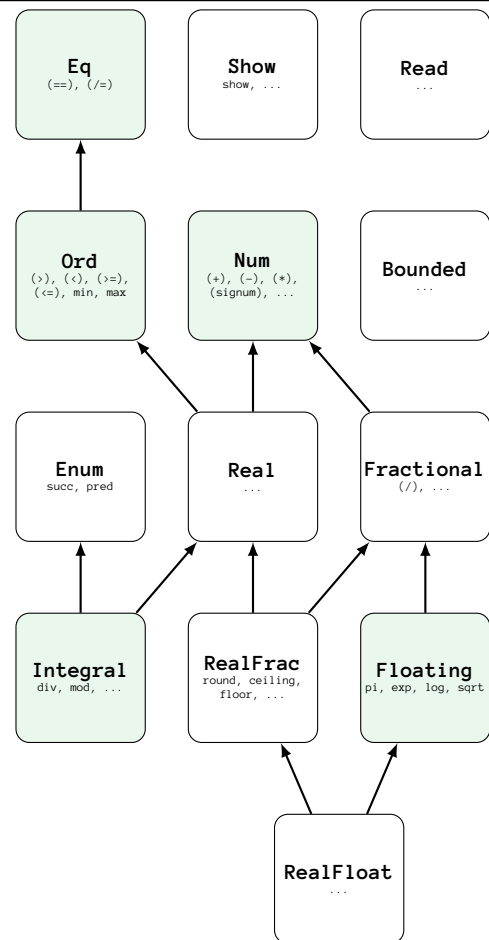
Graphen/GraphWegPfad

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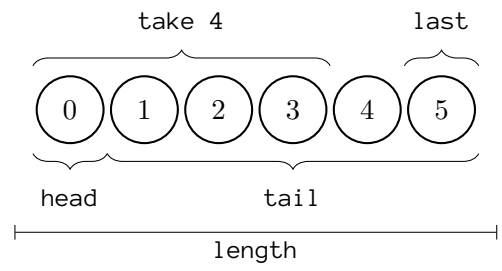
Graphen/GraphZyklus

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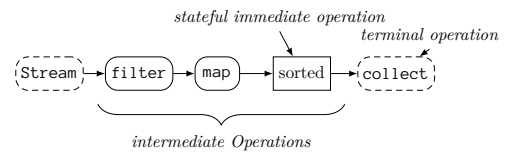


Haskell/HaskellTypen

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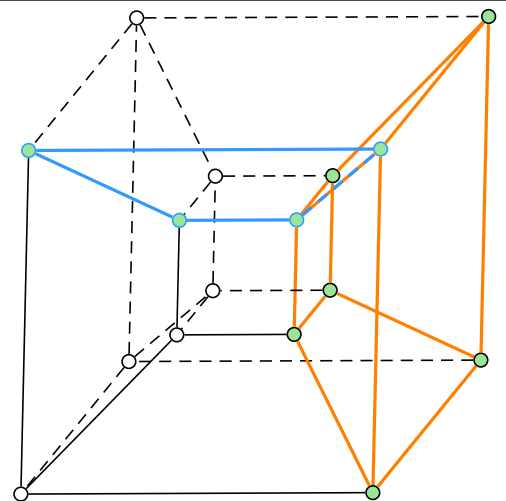
Haskell/Listenoperationen



Java/StreamDemo

	$\bar{a}$	$a$	$a$	$\bar{a}$	
$\bar{b}$	0	0	0	0	$\bar{d}$
$b$	1	1	1	1	$\bar{d}$
$b$	1	1	1	1	$d$
$\bar{b}$	0	0	1	1	$d$
	$\bar{c}$	$\bar{c}$	$c$	$c$	

Logik/KVDiagramm



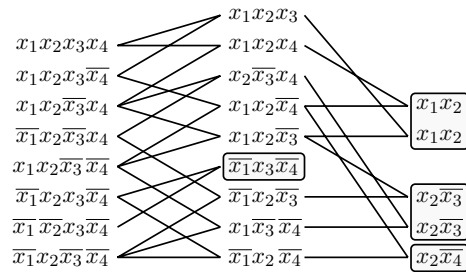
Logik/KVWuerfel



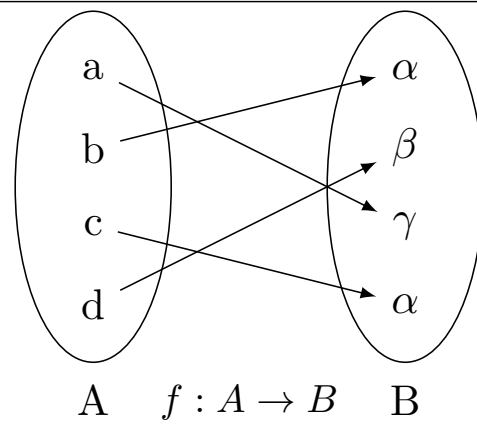
Logik/QuineMcCluskeyTabelle

	1	2	3	4	5	6	7	8
$x_1x_2$	+	+	+		+			
$x_2\bar{x}_3$			+	+	+			+
$x_2\bar{x}_4$		+			+	+		+
$\bar{x}_1x_3\bar{x}_4$						+	+	

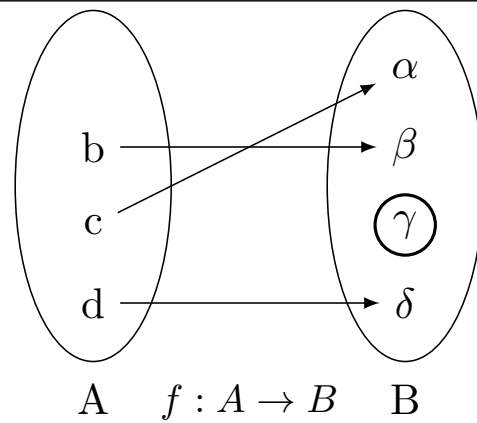
Logik/QuineMcCluskeyZusammenfassen

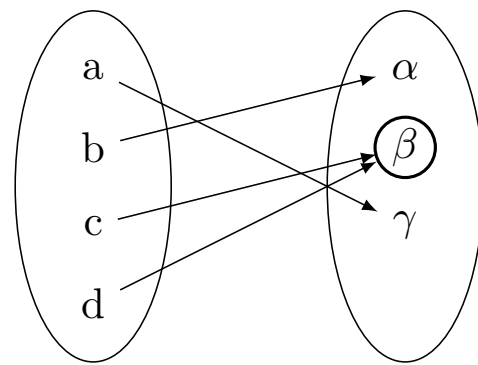


Mengen/FunktionBijektiv



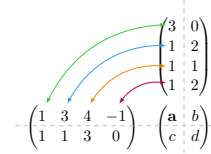
Mengen/FunktionInjektiv





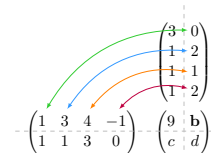
$A \quad f : A \rightarrow B \quad B$

Mengen/FunktionSurjektiv



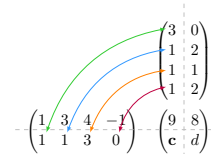
Für  $a$  ergibt sich also:  
 $a = 1 * 3 + 3 * 1 + 4 * 1 + (-1) * 1$   
 $= 9$

Mengen/Mengenmultiplikation/Mengenmultiplikation1



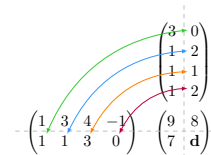
Für  $b$  ergibt sich also:  
 $b = 1 * 0 + 3 * 2 + 4 * 1 + (-1) * 2$   
 $= 8$

Mengen/Mengenmultiplikation/Mengenmultiplikation2



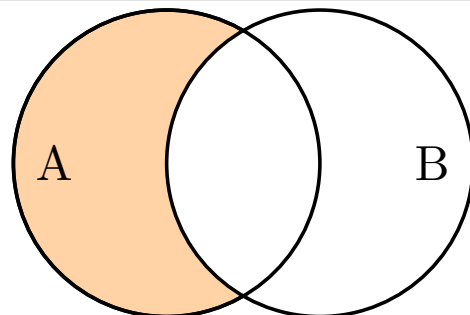
Für  $c$  ergibt sich also:  
 $c = 1 * 3 + 1 * 1 + 3 * 1 + 0 * 1$   
 $= 7$

Mengen/Mengenmultiplikation/Mengenmultiplikation3

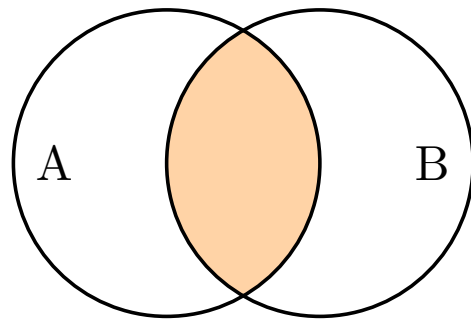


Für  $d$  ergibt sich also:  
 $d = 1 * 0 + 1 * 2 + 3 * 1 + 0 * 2$   
 $= 5$

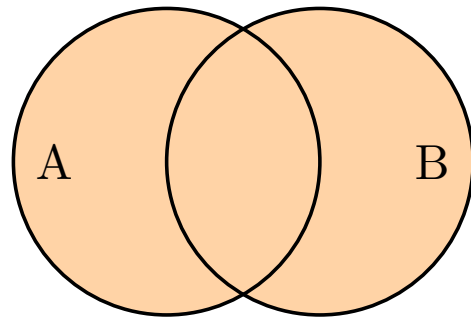
Mengen/Mengenmultiplikation/Mengenmultiplikation4



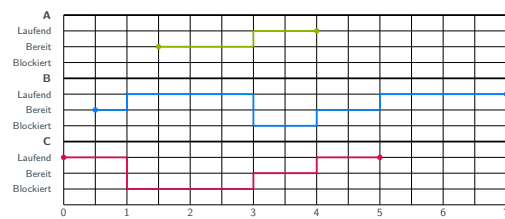
Mengen/VennDifferenz



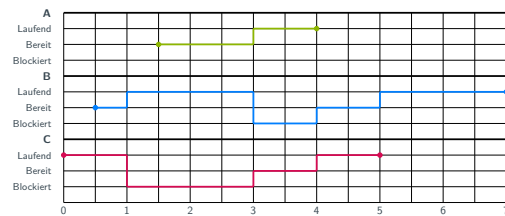
Mengen/VennSchnitt



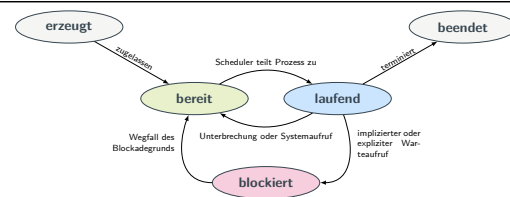
Mengen/VennVereinigung



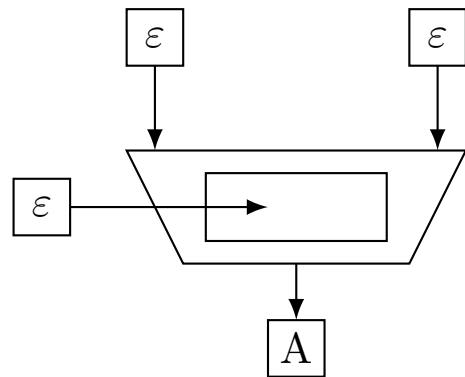
Prozesse/FCFS-WorstCase



Prozesse/FCFS



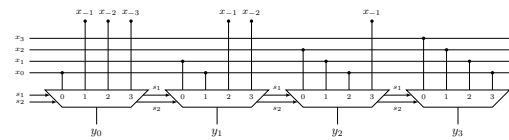
Prozesse/Prozesszustaende



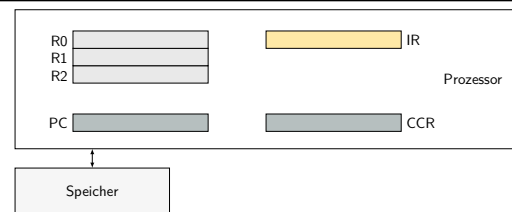
Rechner/ALU

$\delta$	Zustand			Folgez.		NS			WO			T
	$h_0$	$z_0$	$z_1$	$z'_0$	$z'_1$	$\bullet$	$\circ$	$\circ$	$\bullet$	$\circ$	$\circ$	
$\delta_0$	0	0	0	0	1	$\bullet$	$\circ$	$\circ$	$\circ$	$\circ$	$\bullet$	$7 \Rightarrow h'_0 = 1$
$\delta_1$	1	0	1	0	1	$\bullet$	$\circ$	$\circ$	$\circ$	$\circ$	$\bullet$	$T - 1$
$\delta_3$	0	0	1	1	0	$\circ$	$\bullet$	$\circ$	$\circ$	$\bullet$	$\circ$	$2 \Rightarrow h'_0 = 1$
$\delta_4$	1	1	0	1	0	$\circ$	$\bullet$	$\circ$	$\circ$	$\bullet$	$\circ$	$T - 1$
$\delta_6$	0	1	0	1	1	$\circ$	$\circ$	$\bullet$	$\circ$	$\circ$	$\circ$	$7 \Rightarrow h'_0 = 1$
$\delta_7$	1	1	1	1	1	$\circ$	$\circ$	$\bullet$	$\circ$	$\circ$	$\circ$	$T - 1$
$\delta_9$	0	1	1	0	0	$\circ$	$\bullet$	$\circ$	$\circ$	$\bullet$	$\circ$	$2 \Rightarrow h'_0 = 1$
$\delta_{10}$	1	0	0	0	0	$\circ$	$\bullet$	$\circ$	$\circ$	$\bullet$	$\circ$	$T - 1$

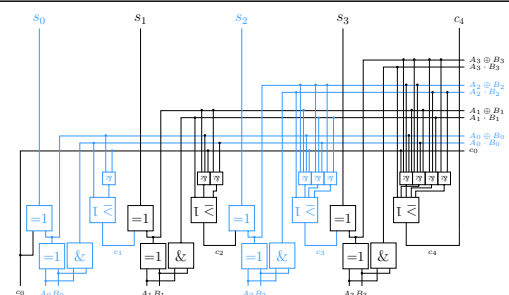
Rechner/AmpelPLA



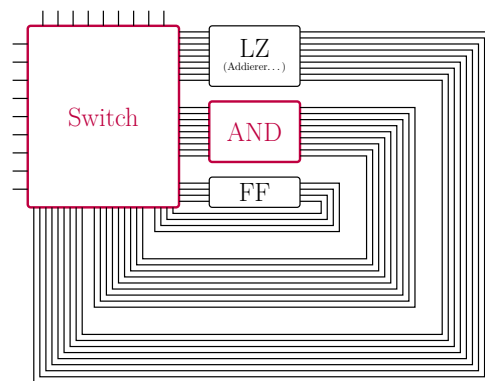
Rechner/BarrelShifter



Rechner/Beispielprozessor

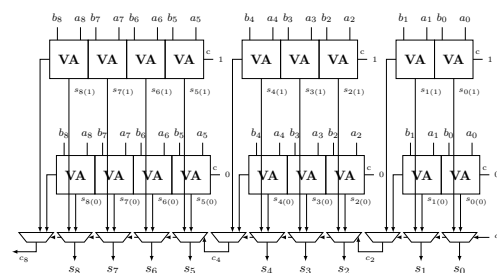


Rechner/CLA

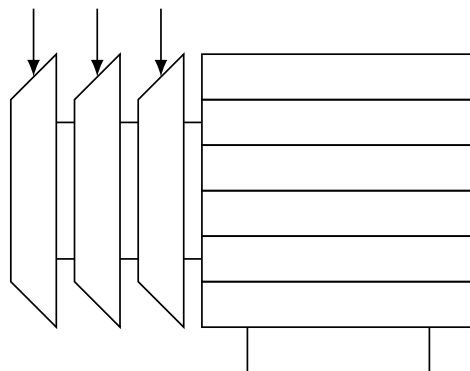


Rechner/CPLD

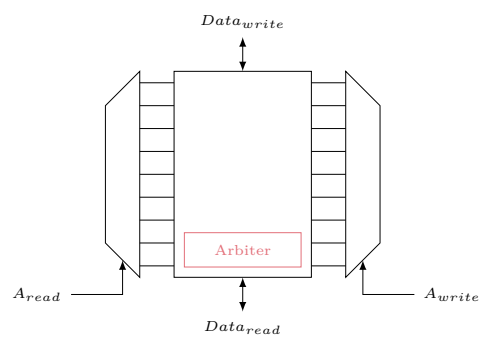
CSA - 9-bit Carry-Select-Addierer



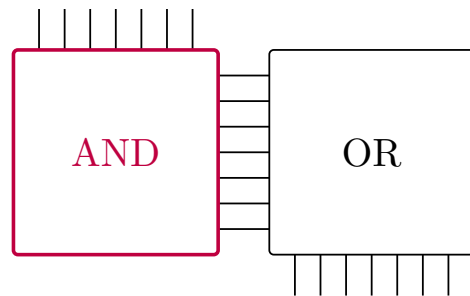
Rechner/CSA



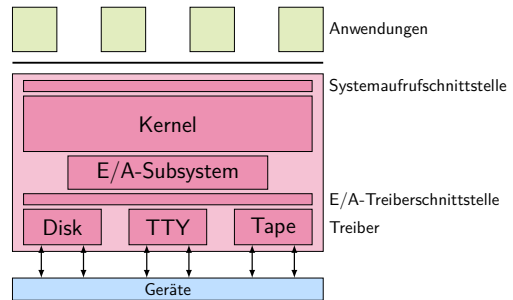
Rechner/DreiTorRegister



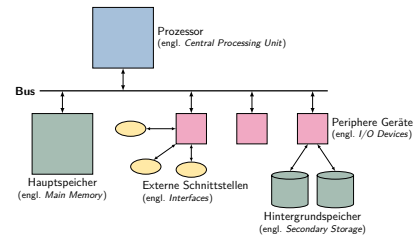
Rechner/Eintorspeicher



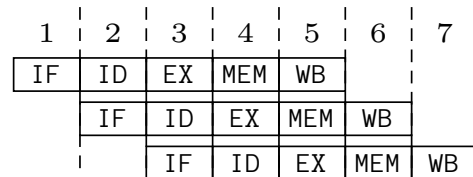
Rechner/GALPAL



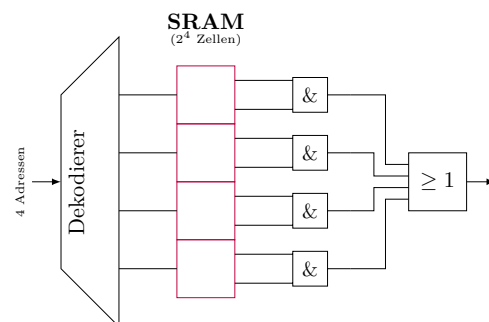
Rechner/Geraeteverwaltung



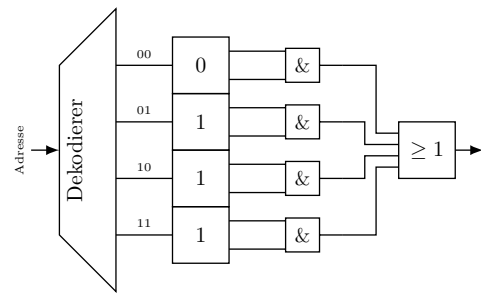
Rechner/HardwareSkizze



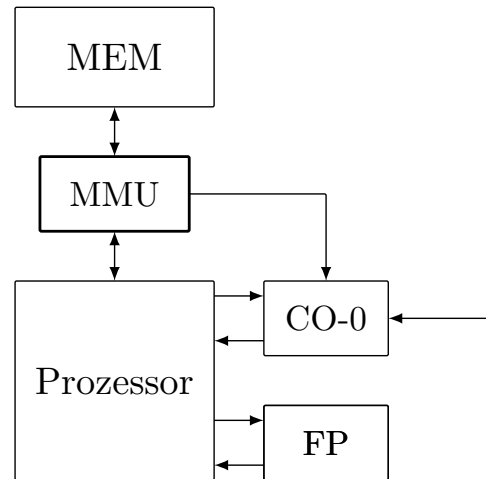
Rechner/ISA



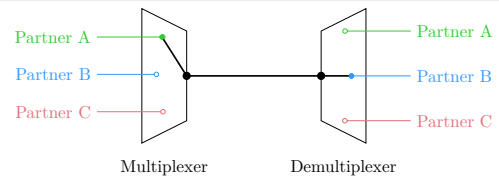
Rechner/LUT



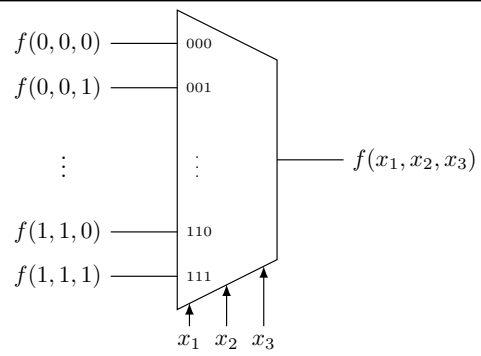
Rechner/LUT0der



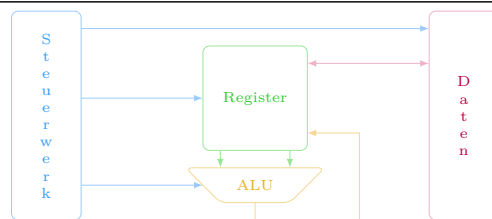
Rechner/MIPS



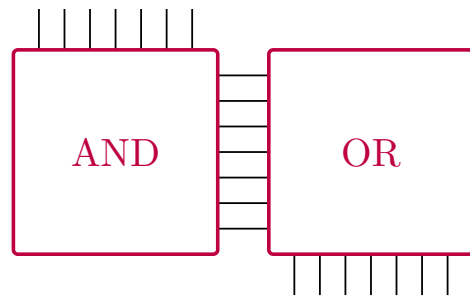
Rechner/MuxDemuxKommunikation



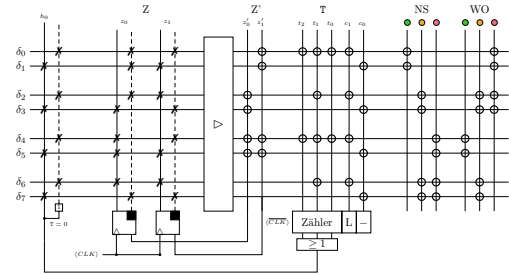
Rechner/MuxShannon



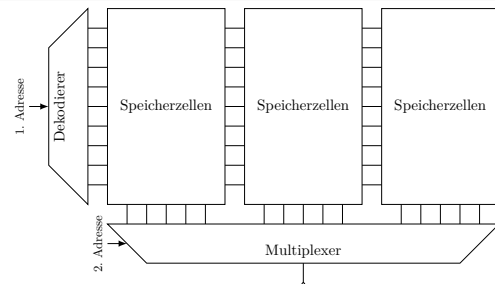
Rechner/NAdressmaschine



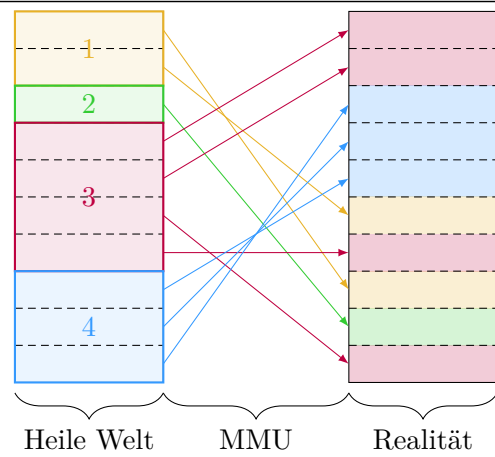
Rechner/PLA



Rechner/PLAZuAmpel

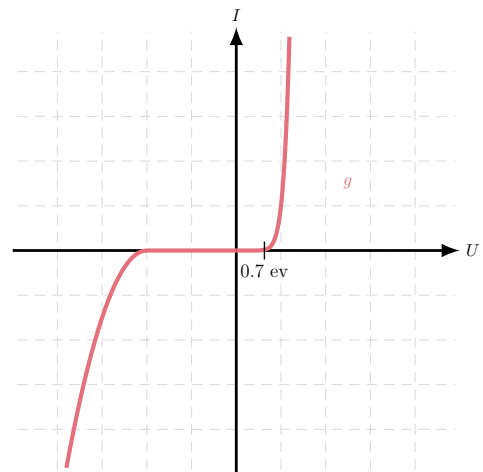


Rechner/PROM

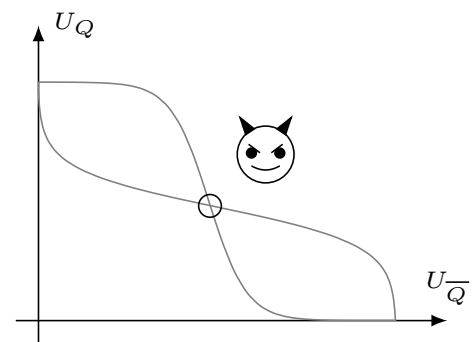


Rechner/Pages

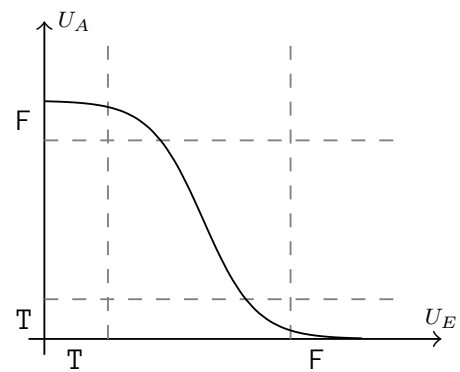




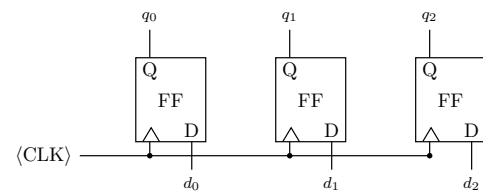
Rechner/Physik/DiodenStromstaerke



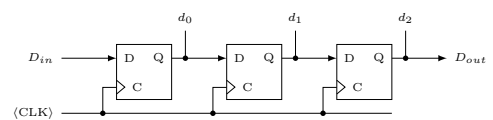
Rechner/Physik/Metastabil



Rechner/Physik/TransistorStoertoleranz

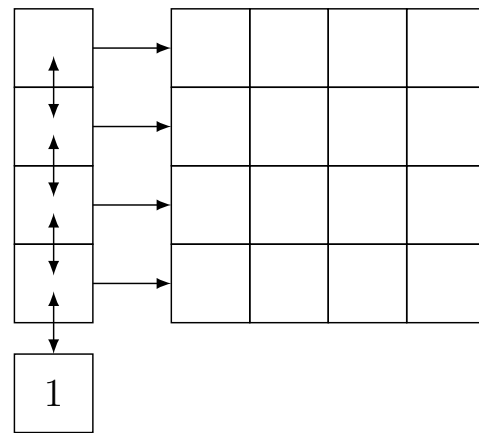


Rechner/RegisterParallel

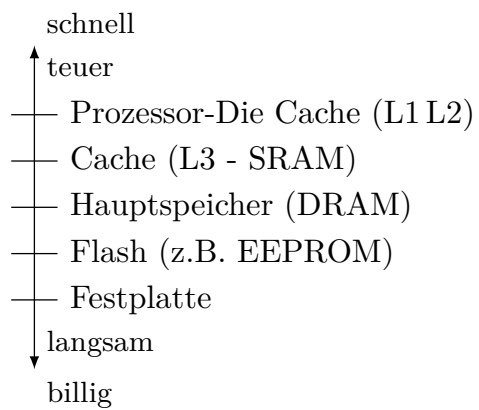


Rechner/RegisterSeriell

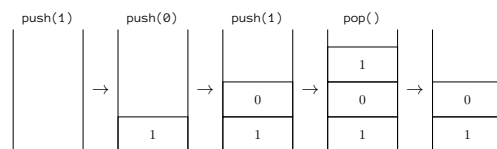
## Rechner/Shiftregister



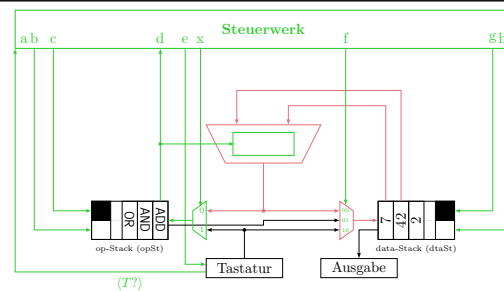
## Rechner/Speicherhierarchie



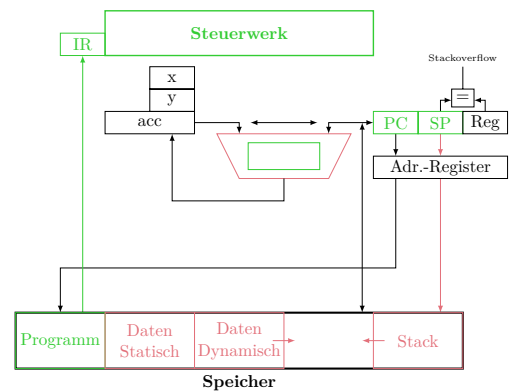
## Rechner/StackExample



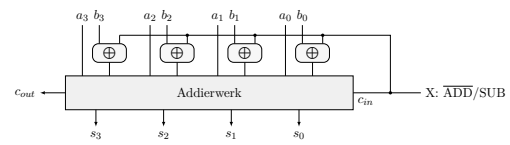
## Rechner/Stackmaschine



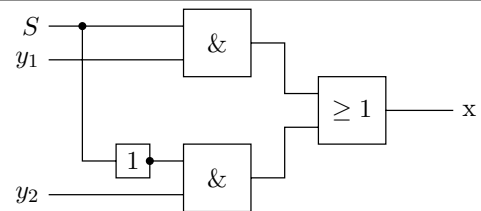
## Rechner/StackmaschineSimpler



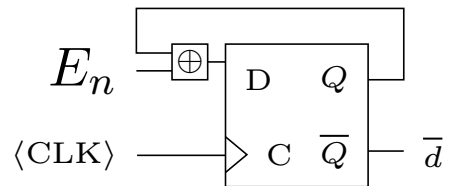
## Schaltkreis/Addier-Subtrahierer



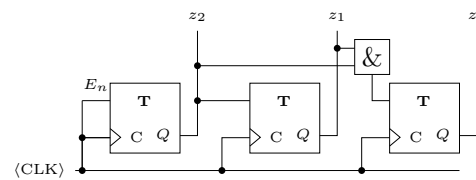
## Schaltkreis/Demultiplexer



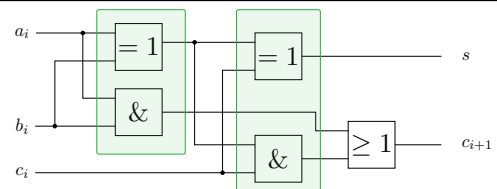
## Schaltkreis/SynchroneZählerDFF

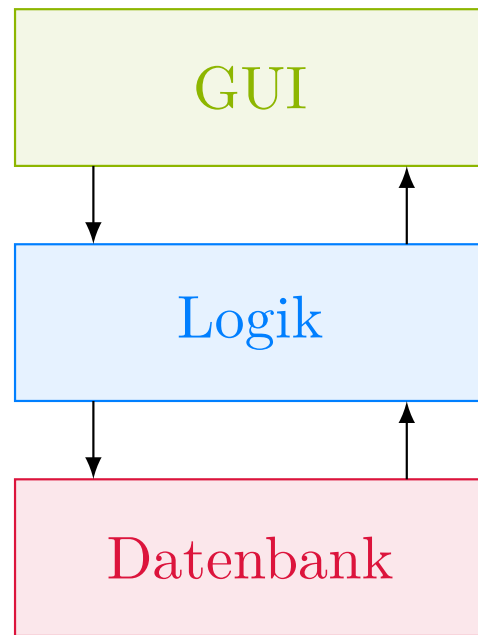


## Schaltkreis/SynchroneZählerTFF

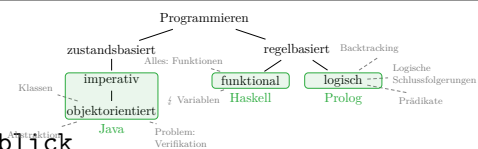


## Schaltkreis/Volladdierer

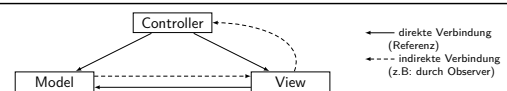




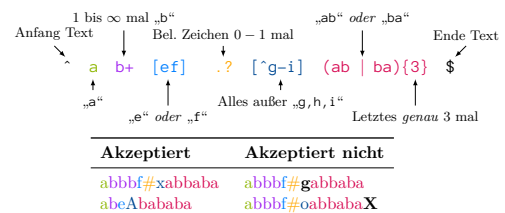
Software/DreiSchichtenArchitektur



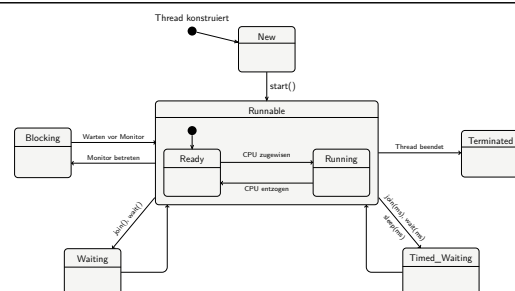
Software/Meta/ProgrammierparadigmenUeberblick



Software/ModelViewController

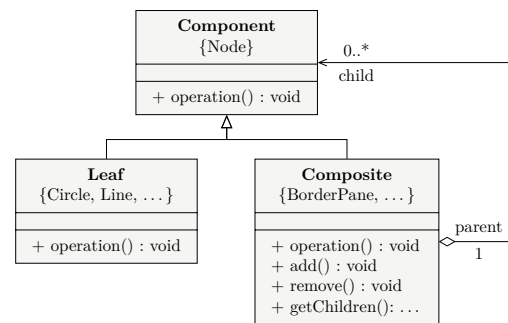


Software/RegexExample

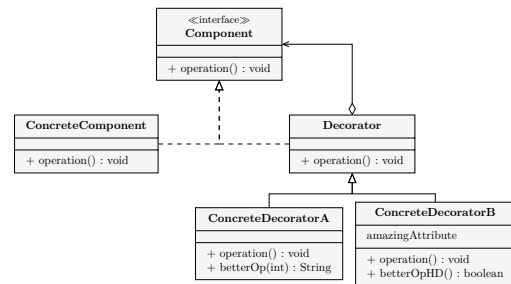


Software/ThreadStates

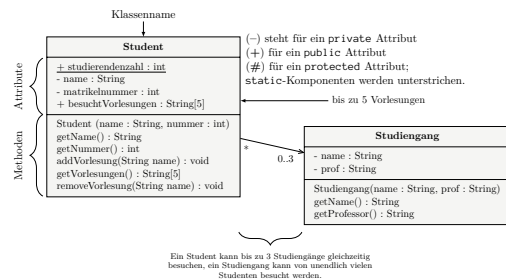
## Software/UMLCompositePattern



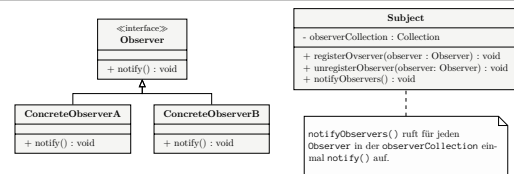
## Software/UMLDecoratorPattern



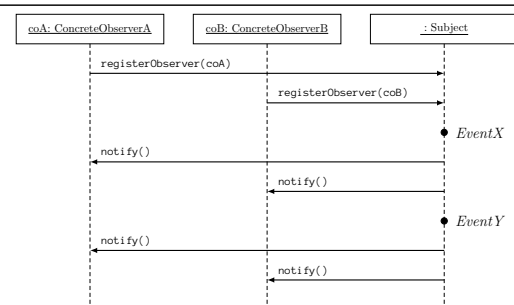
## Software/UMLExample



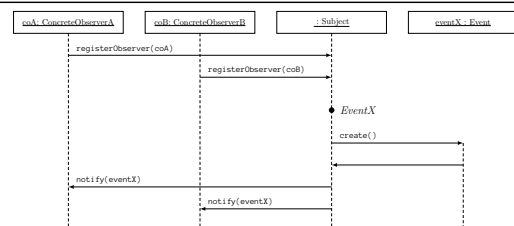
## Software/UMLObserverPattern

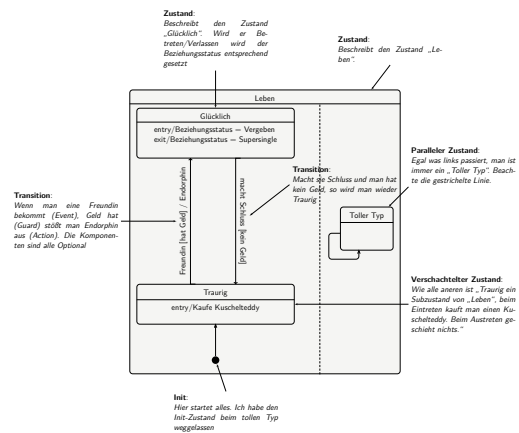


## Software/UMLSEQObserverPattern

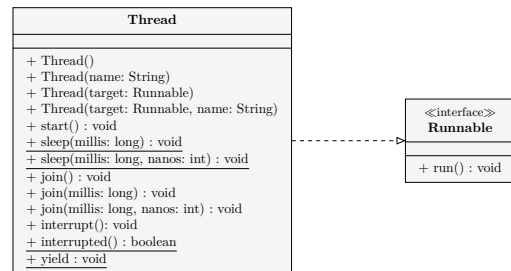


## Software/UMLSEQObserverPatternAdapted





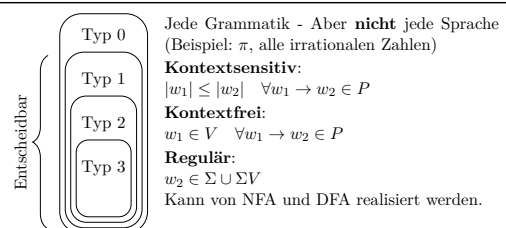
## Software/UMLStateDiagramExample



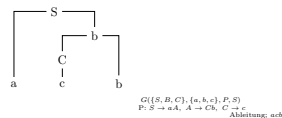
## Software/UMLThread

		1 a	2 b	3 c	4 c
T[1,j]	1	A	B	CE	CE
T[2,j]	2	D	—	E	
T[3,j]	3	S	—		
T[4,j]	4	S			

## Sprachen/CYKAlgorithmus



## Sprachen/ChomskyHierarchie



## Sprachen/Grammatik