

# Inhaltsverzeichnis

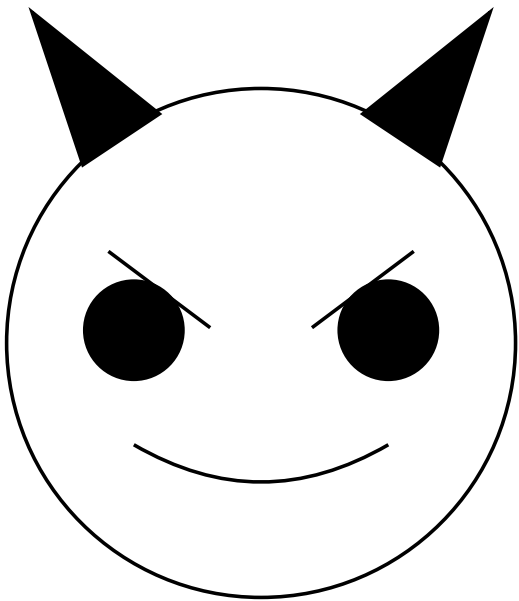
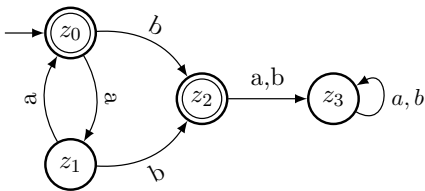
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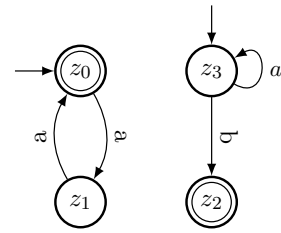
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%%Einbindung erfolgt über:
\getGraphics{\Pfad}
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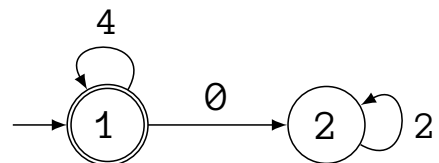
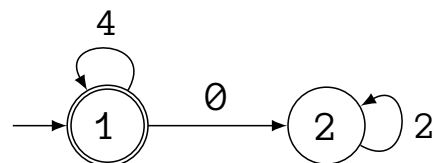
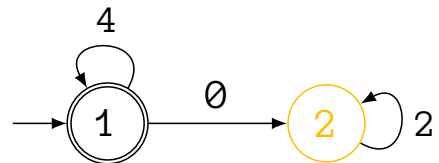
Pfad	Ergebnis
Allerlei/Teufel	
Automat/AutomatDFA	<p>Deterministic Finite Automaton</p>  $D = \left( \begin{array}{ccccc} \text{Zustände} & \text{Eingabe} & \text{Übergangsfkt.} & \text{Start(s)} & \text{Endzust.} \\ Z & \Sigma & \delta & S & E \\ \text{Menge} & \text{Alphabet} & Z \times \Sigma \rightarrow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



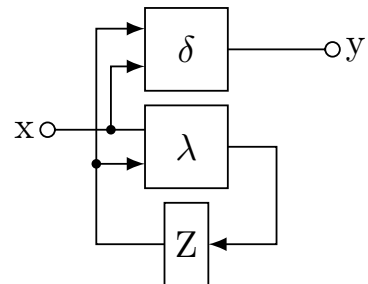
$$N = \left( \begin{array}{c} \text{Zustände} \\ Z \\ \text{Menge} \end{array}, \begin{array}{c} \text{Eingabe} \\ \Sigma \\ \text{Alphabet} \end{array}, \begin{array}{c} \text{Übergangsfkt.} \\ \delta \\ Z \times \Sigma \rightarrow Z^* \end{array}, \begin{array}{c} \text{Start(s)} \\ S \\ \subseteq Z \end{array}, \begin{array}{c} \text{Endzust.} \\ E \\ \subseteq Z \end{array} \right)$$

$$T(N) = \{x \in \Sigma^* \mid \delta(S, x) \cap E \neq \emptyset\}$$

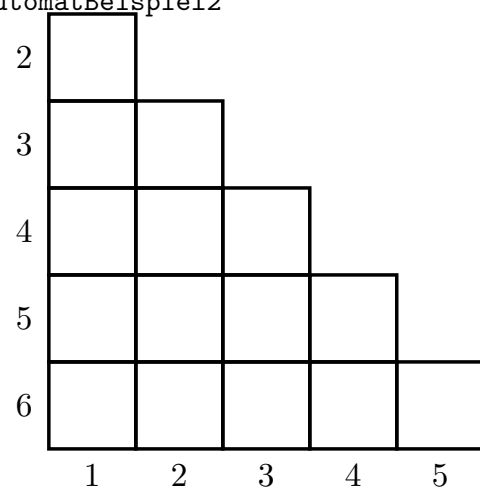
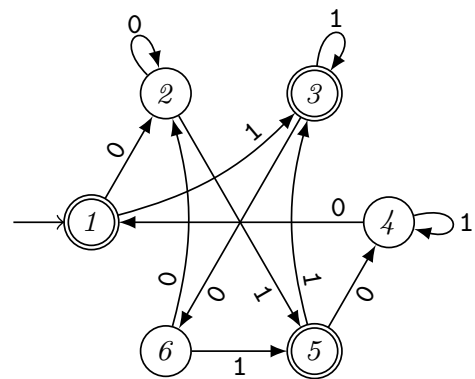
		1 a	2 b	3 c	4 c
T[1,j]	1	A	B	CE	CE
T[2,j]	2	D	—	E	
T[3,j]	3	S	—		
T[4,j]	4	S			



Isch bin a Hädder!



Ausgabe von Zustand & Eingabe abhängig



Automat/MinimalautomatBeispiel/MinimalautomatBeispiel3

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

Automat/MinimalautomatBeispiel/MinimalautomatBeispiel4

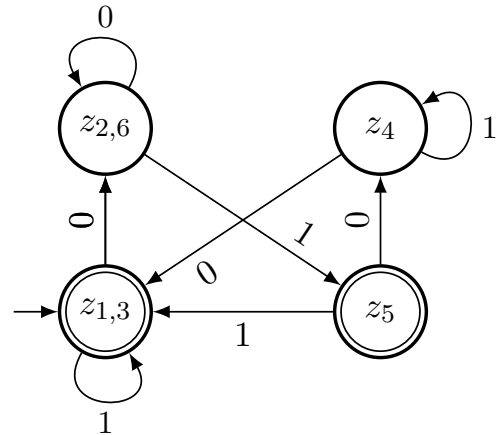
2	0				
3		0			
4	0	1	0		
5		0		0	
6	0		0	1	0
	1	2	3	4	5

Automat/MinimalautomatBeispiel/MinimalautomatBeispiel5

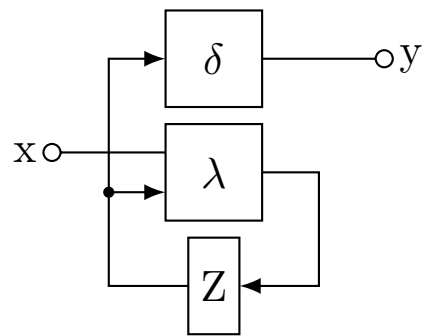
2	0				
3		0			
4	0	1	0		
5	2	0	2	0	
6	0		0	1	0
	1	2	3	4	5



# Automat/MinimalautomatBeispiel/MinimalautomatBeispiel6

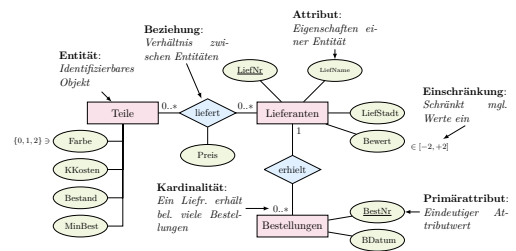


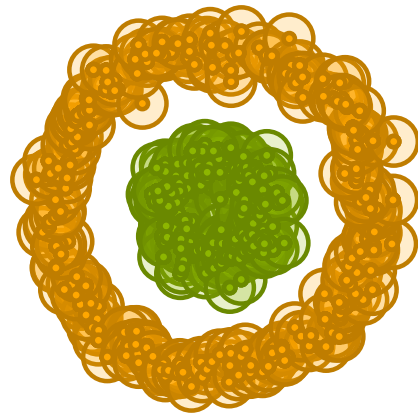
## Automat/MooreAutomat



Ausgabe nur vom Zustand abhängig

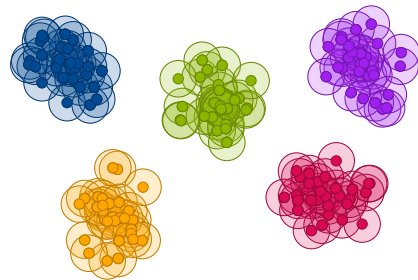
## Datenbanken/ERExample





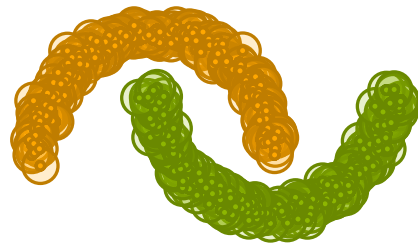
Eigene/Proseminar/Cluster/en-circles

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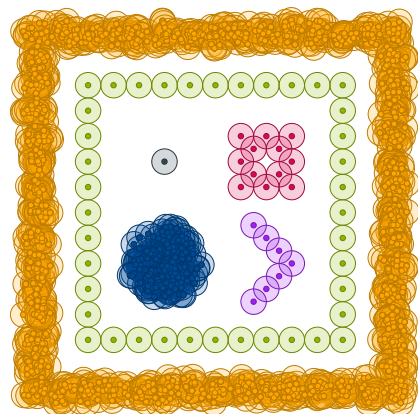
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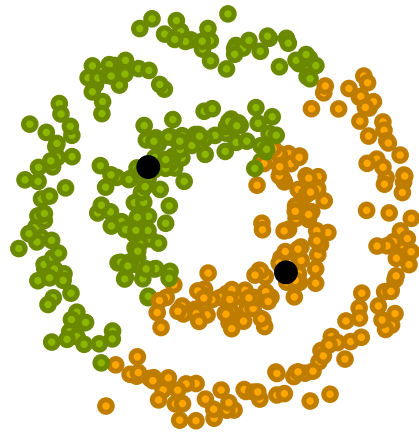
Eigene/Proseminar/Cluster/en-moons

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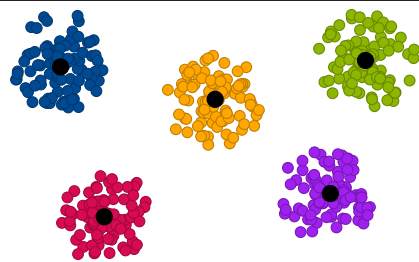
Eigene/Proseminar/Cluster/en-special

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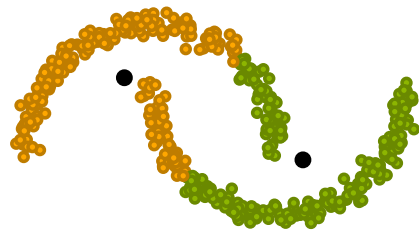
Eigene/Proseminar/Cluster/km-circles

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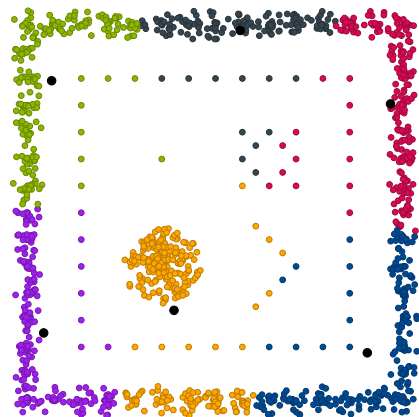
Eigene/Proseminar/Cluster/km-clusters

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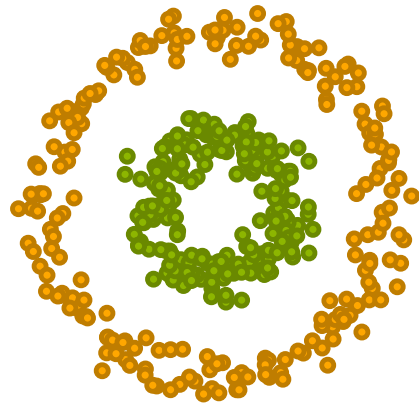
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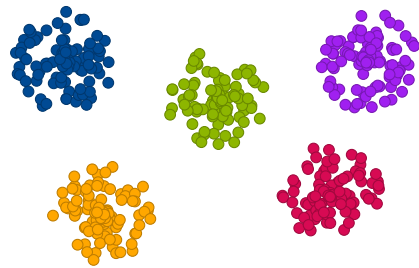
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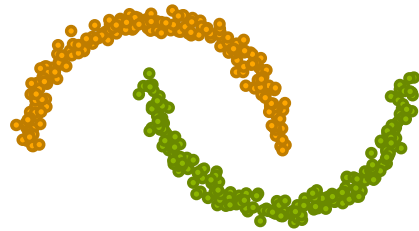
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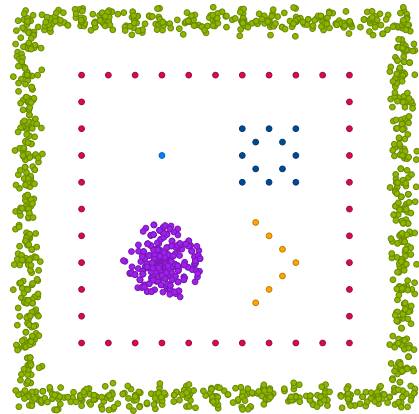
Eigene/Proseminar/Cluster/kn-clusters

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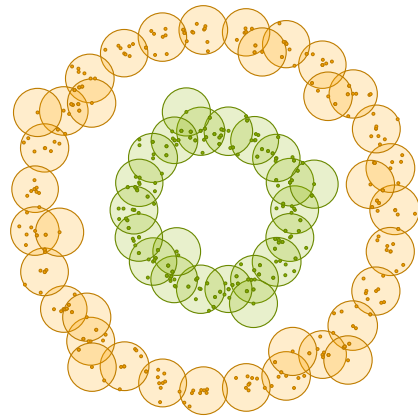
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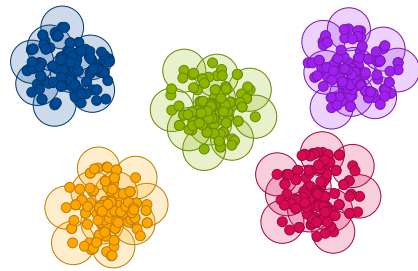
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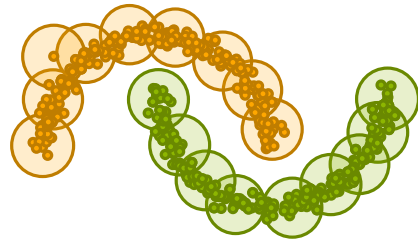
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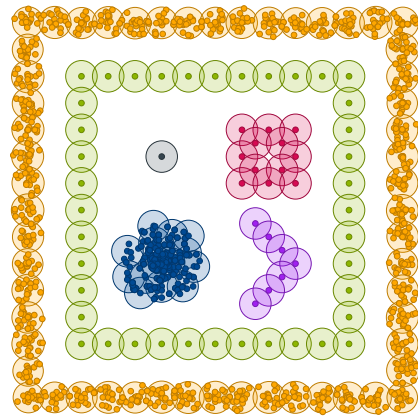
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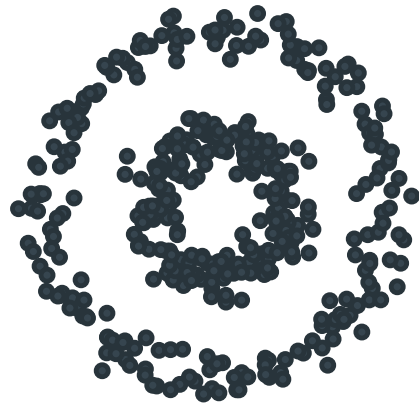
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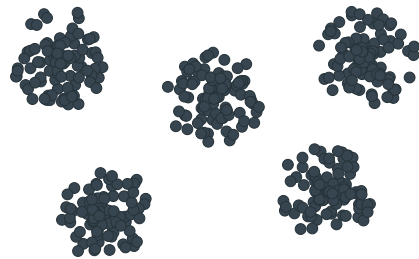
Eigene/Proseminar/Cluster/rolf-special

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Eigene/Proseminar/Cluster/thumb-circles  
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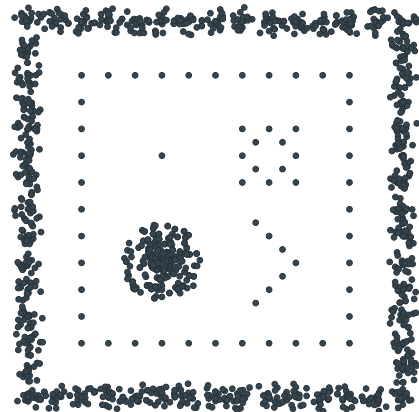
Eigene/Proseminar/Cluster/thumb-clusters  
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Eigene/Proseminar/Cluster/thumb-moons  
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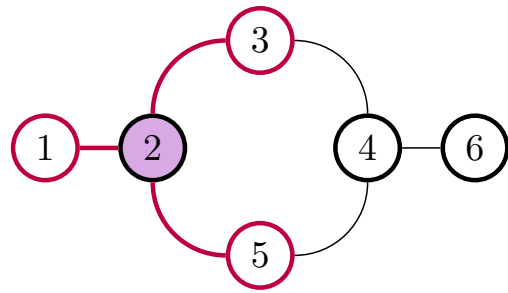
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Eigene/Proseminar/Cluster/thumb-special  
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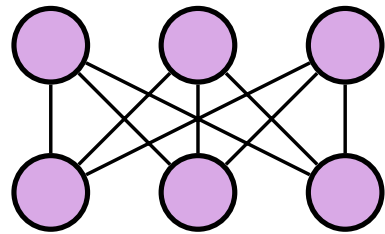
Graphen/GraphNachbarschaftGrad



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Graphen/GraphNichtPlanarK33

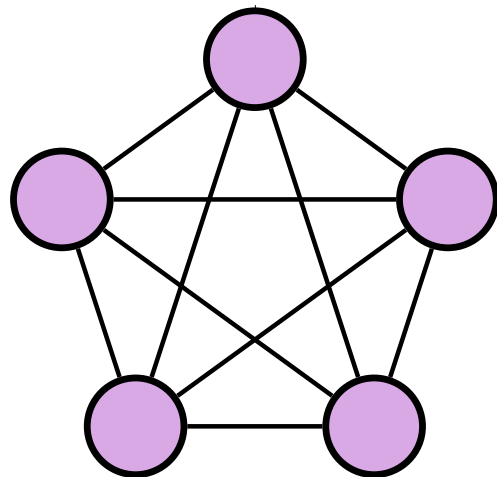
$K_{3,3}$



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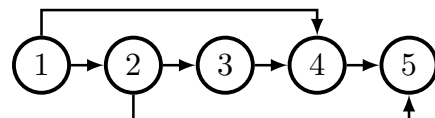
Graphen/GraphNichtPlanarK5

$K_5$

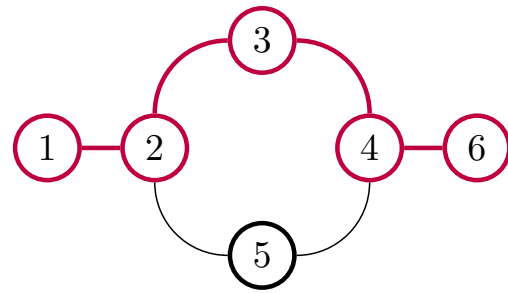


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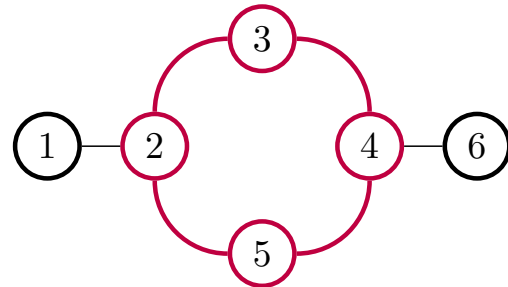
Graphen/GraphTopologie



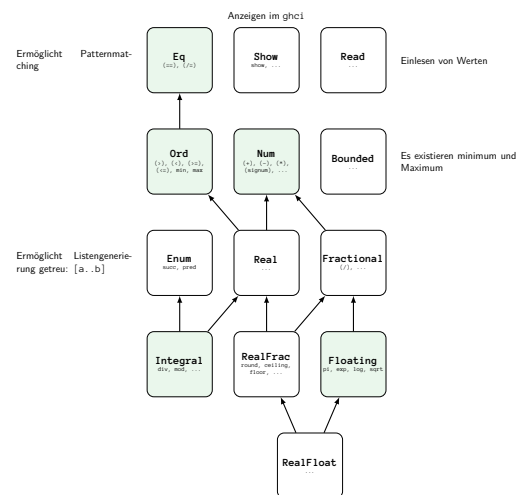
## Graphen/GraphWegPfad



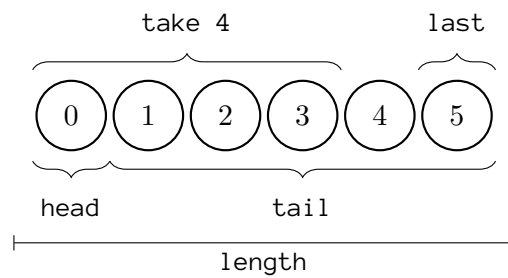
## Graphen/GraphZyklus



## Haskell/HaskellTypen

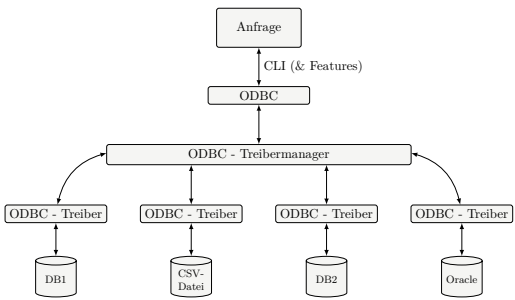


## Haskell/Listenoperationen

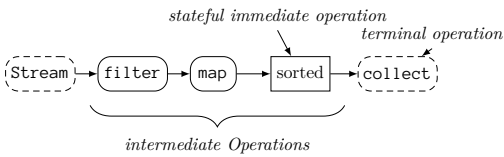




Java/ODBCSchematisch



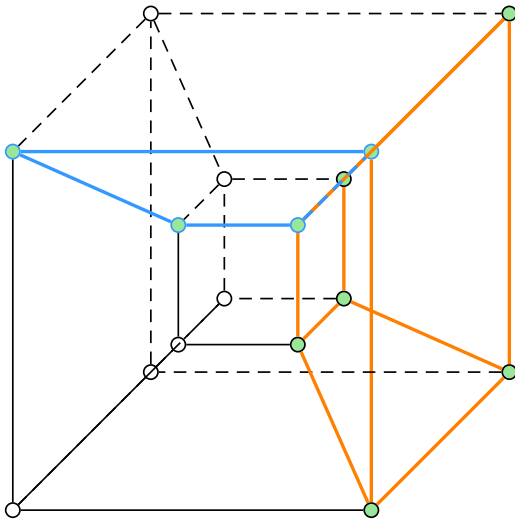
Java/StreamDemo



Logik/KVDiagramm

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

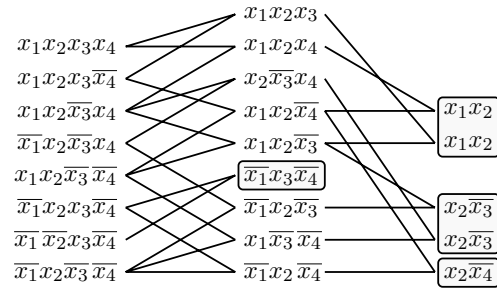
Logik/KVWuerfel



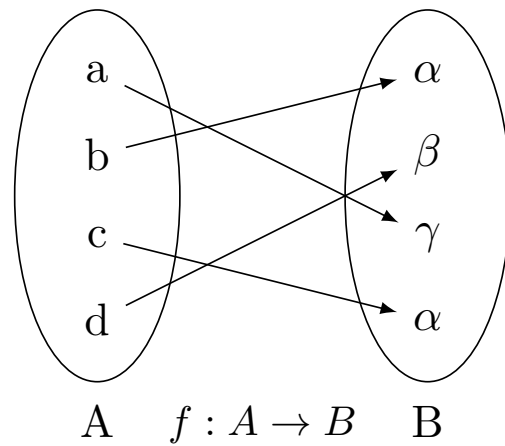
Logik/QuineMcCluskeyTabelle

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

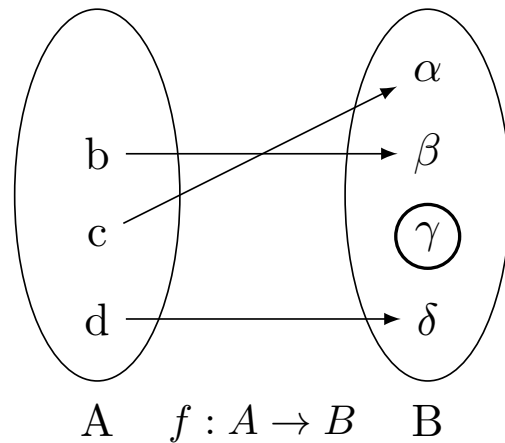
Logik/QuineMcCluskeyZusammenfassen



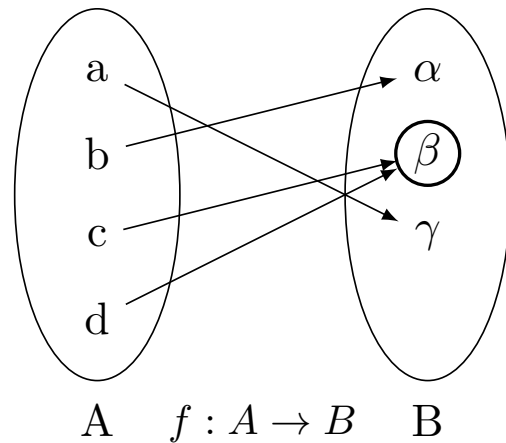
Mengen/FunktionBijektiv



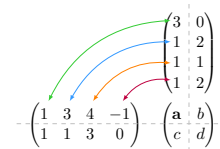
Mengen/FunktionInjektiv



# Mengen/FunktionSurjektiv

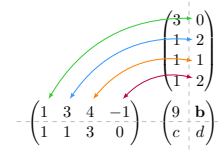


## Mengen/Mengenmultiplikation/Mengenmultiplikation1



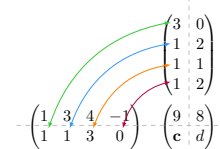
Für  $a$  ergibt sich also:  
 $a = 1 * 3 + 3 * 1 + 4 * 1 + (-1) * 1$   
 $= 9$

## Mengen/Mengenmultiplikation/Mengenmultiplikation2



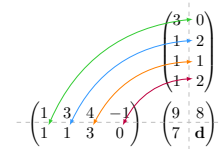
Für  $b$  ergibt sich also:  
 $b = 1 * 0 + 3 * 2 + 4 * 1 + (-1) * 2$   
 $= 8$

## Mengen/Mengenmultiplikation/Mengenmultiplikation3



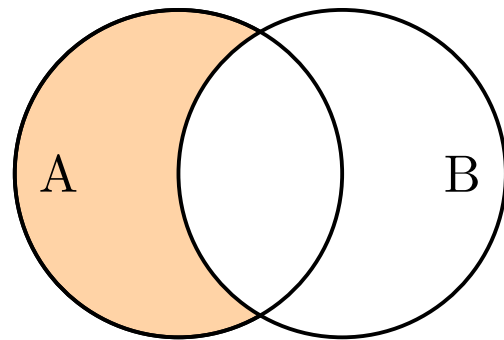
Für  $c$  ergibt sich also:  
 $c = 1 * 3 + 1 * 1 + 3 * 1 + 0 * 1$   
 $= 7$

## Mengen/Mengenmultiplikation/Mengenmultiplikation4

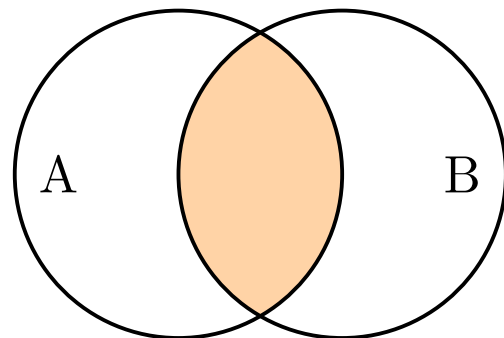


Für  $d$  ergibt sich also:  
 $d = 1 * 0 + 1 * 2 + 3 * 1 + 0 * 2$   
 $= 5$

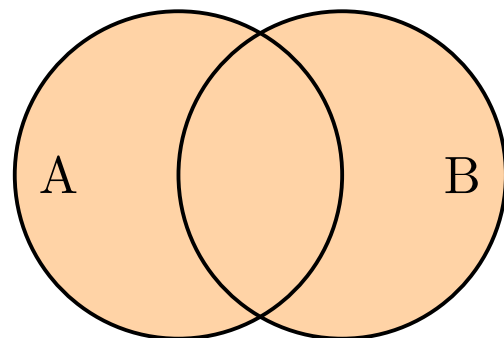
Mengen/VennDifferenz



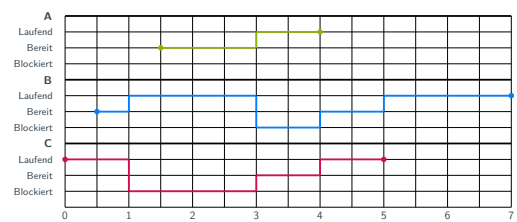
Mengen/VennSchnitt



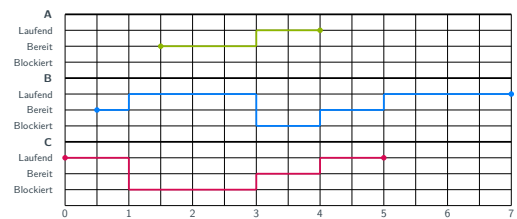
Mengen/VennVereinigung



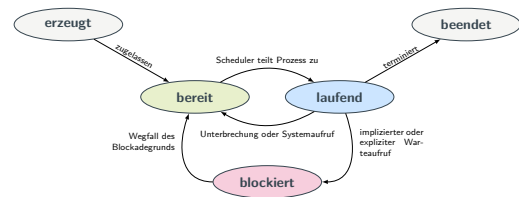
Prozesse/FCFS-WorstCase



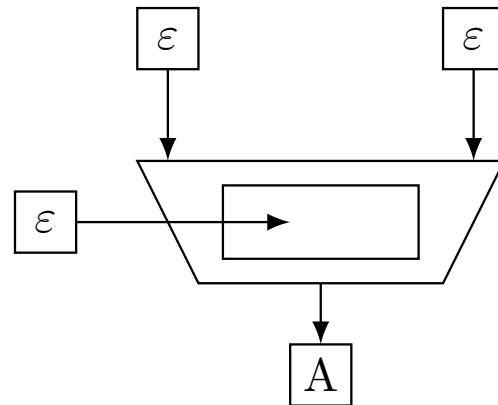
Prozesse/FCFS



## Prozesse/Prozesszustaende



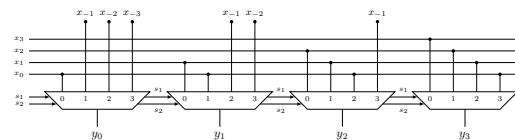
## Rechner/ALU



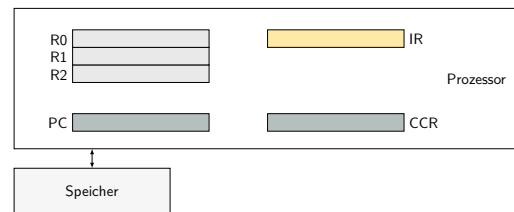
## Rechner/AmpelPLA

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

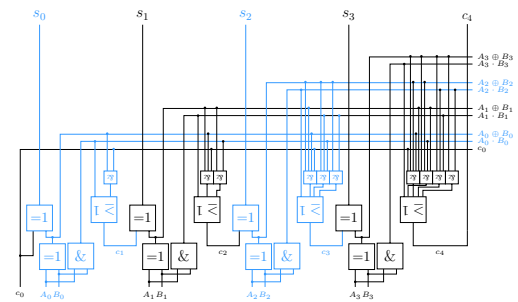
## Rechner/BarrelShifter



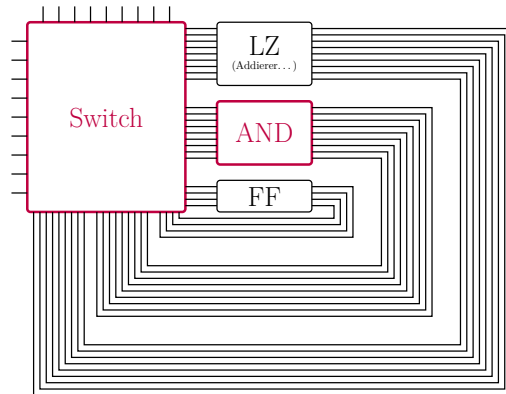
## Rechner/Beispielprozessor



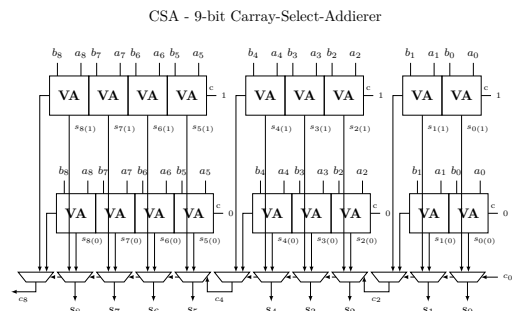
## Rechner/CLA



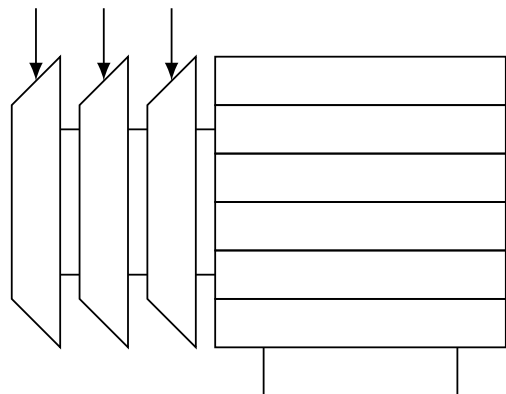
## Rechner/CPLD



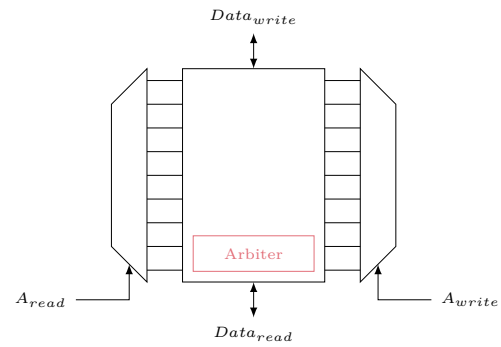
## Rechner/CSA



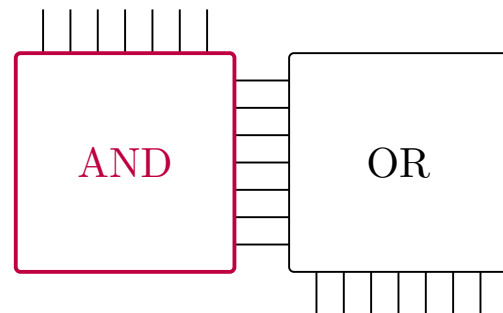
## Rechner/DreiTorRegister



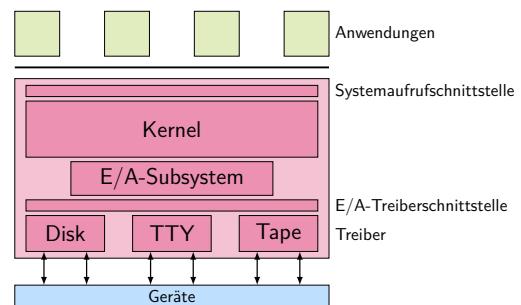
## Rechner/Eintorspeicher



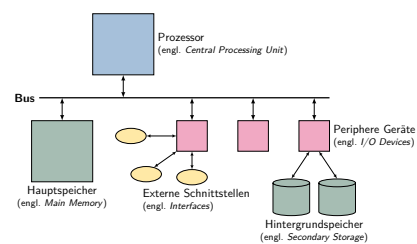
## Rechner/GALPAL



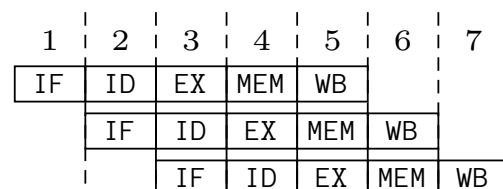
## Rechner/Geraeteverwaltung



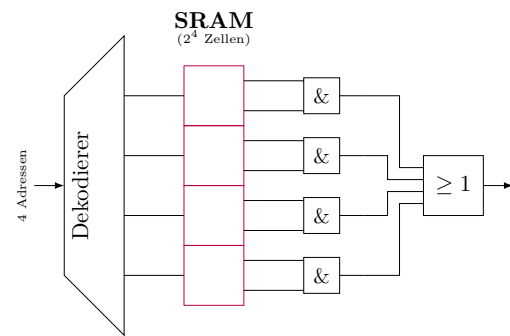
## Rechner/HardwareSkizze



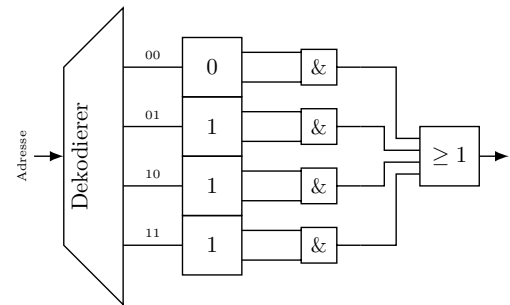
## Rechner/ISA



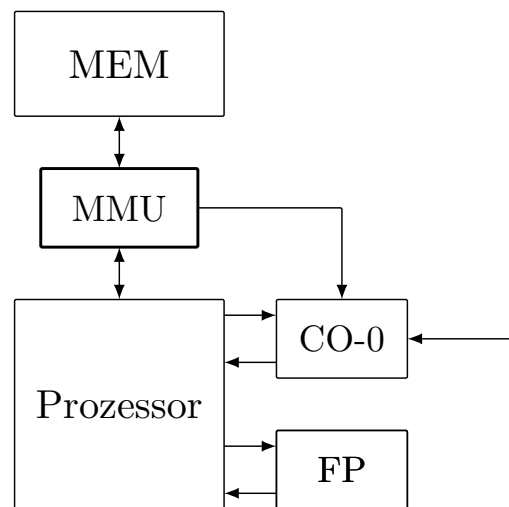
## Rechner/LUT



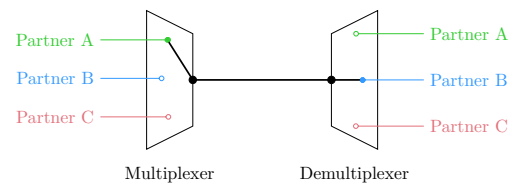
## Rechner/LUT0der



## Rechner/MIPS

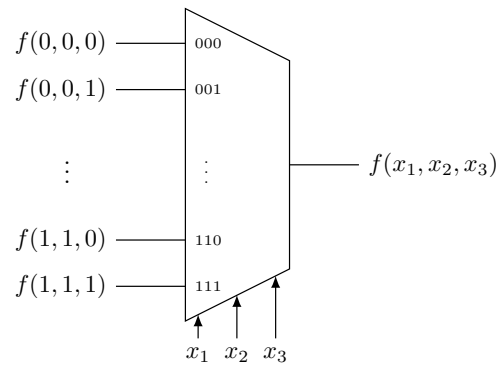


## Rechner/MuxDemuxKommunikation

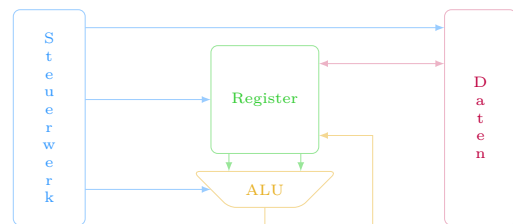




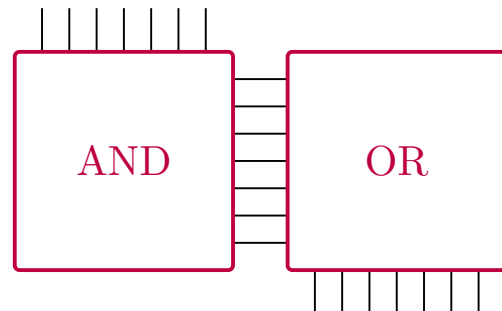
## Rechner/MuxShannon



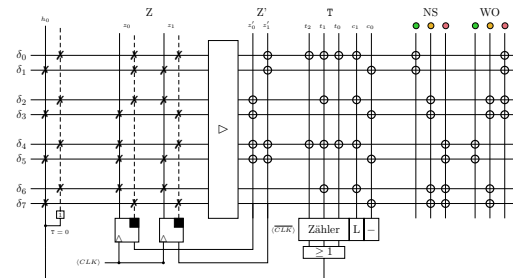
## Rechner/NAdressmaschine



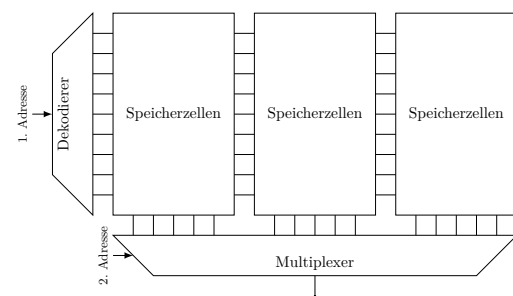
## Rechner/PLA



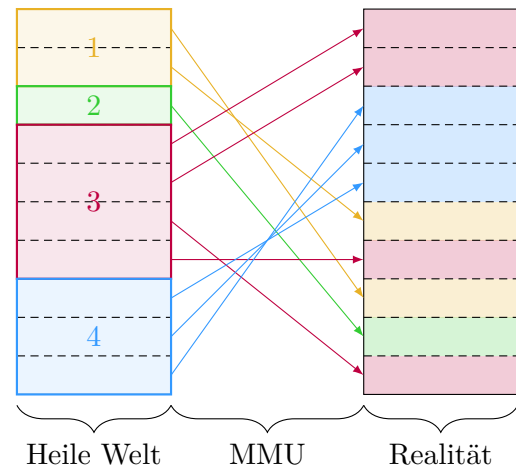
## Rechner/PLAAmpel



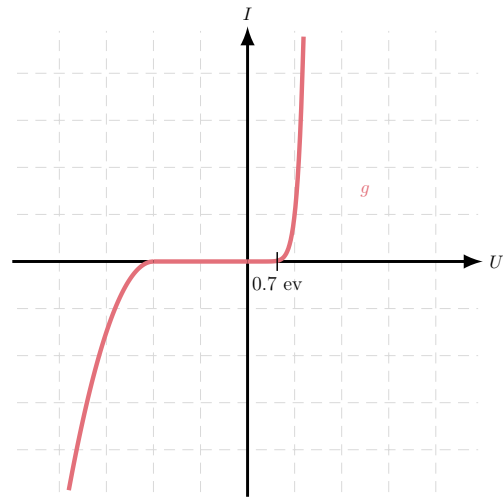
## Rechner/PROM



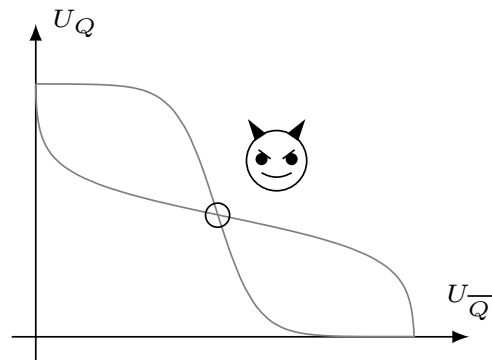
Rechner/Pages



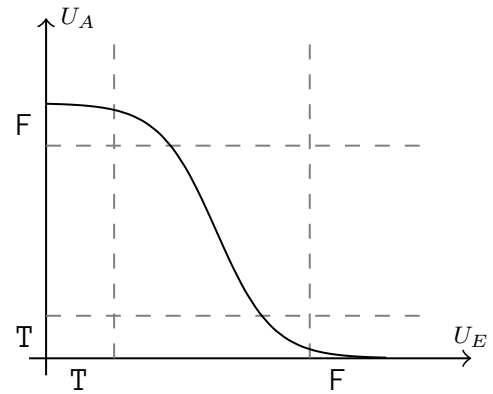
Rechner/Physik/DiodenStromstaerke



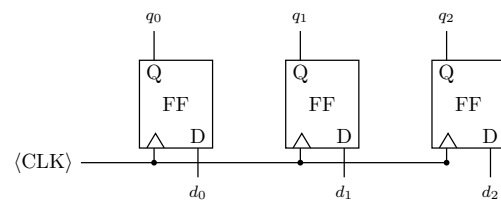
Rechner/Physik/Metastabil



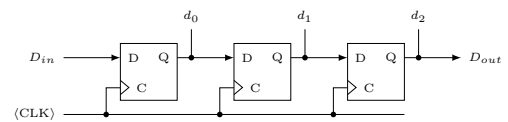
# Rechner/Physik/TransistorStoertoleranz



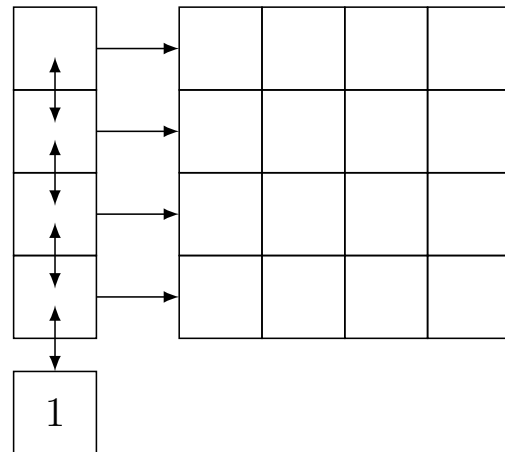
## Rechner/RegisterParallel



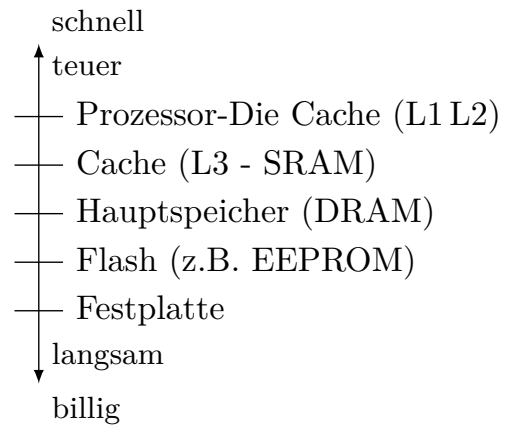
## Rechner/RegisterSeriell



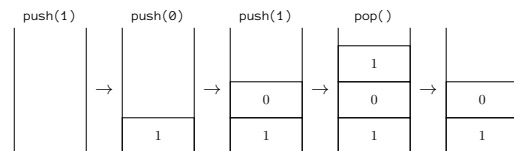
## Rechner/Shiftregister



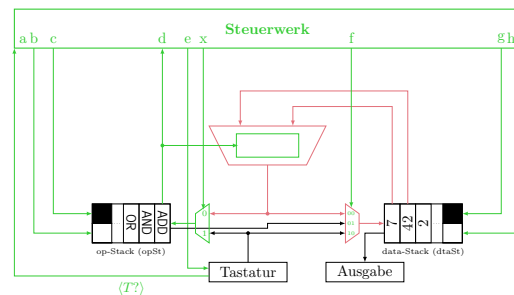
## Rechner/Speicherhierarchie



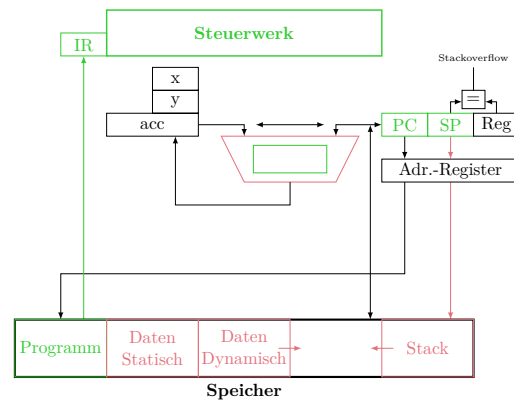
## Rechner/StackExample



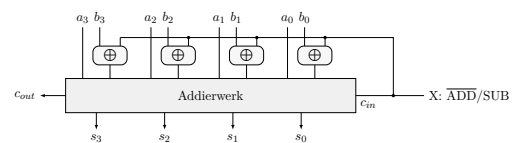
## Rechner/Stackmaschine



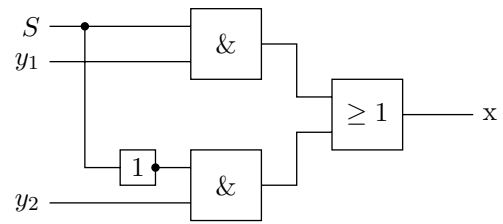
## Rechner/StackmaschineSimpler



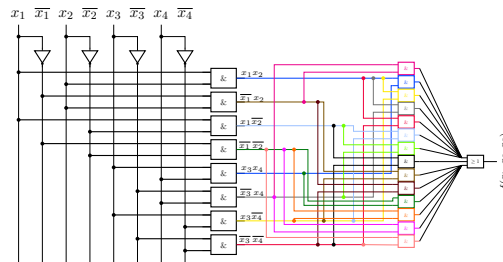
## Schaltkreis/Addier-Subtrahierer



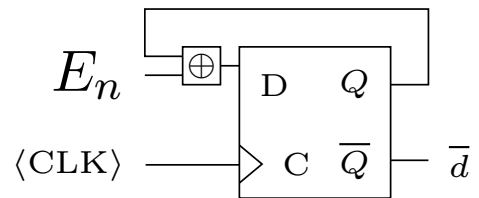
### Schaltkreis/Demultiplexer



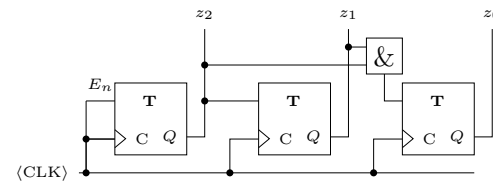
### Schaltkreis/KomplexerSchaltkreis



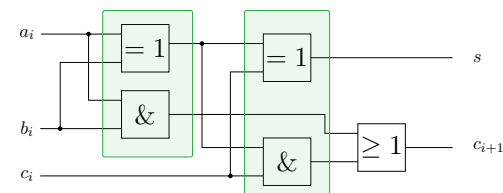
### Schaltkreis/SynchronzaehlerDFF



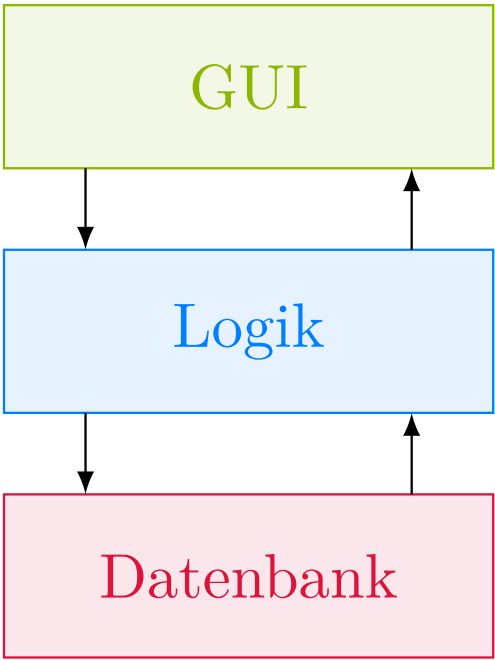
### Schaltkreis/SynchronzaehlerTFF



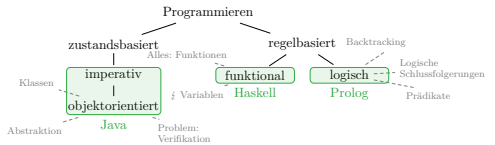
### Schaltkreis/Volladdierer



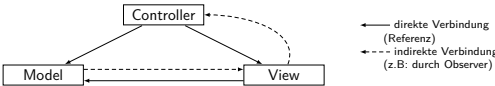
Software/DreiSchichtenArchitektur



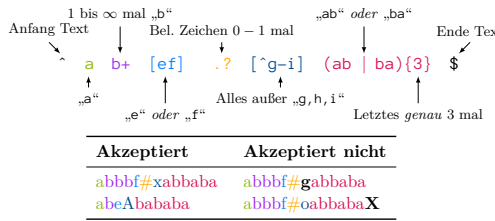
Software/Meta/ProgrammierparadigmenUeberblick



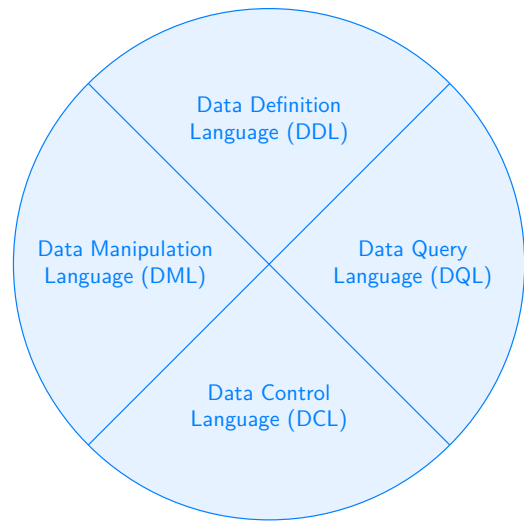
Software/ModelViewController



Software/RegexExample

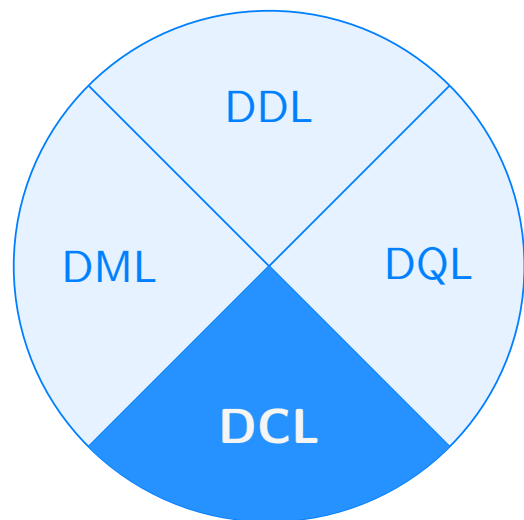


Software/SQL/SQLFields

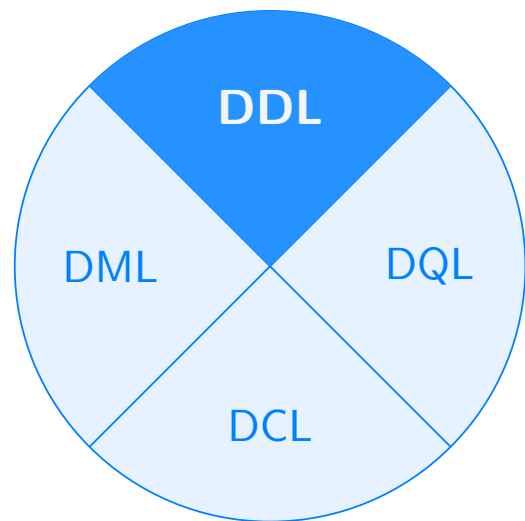


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Software/SQL/SQLFieldsDCL

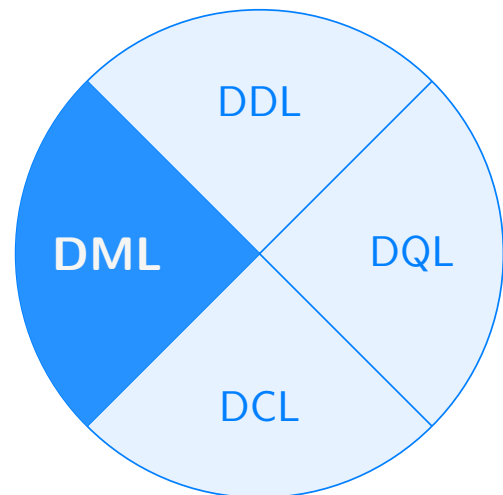


Software/SQL/SQLFieldsDDL



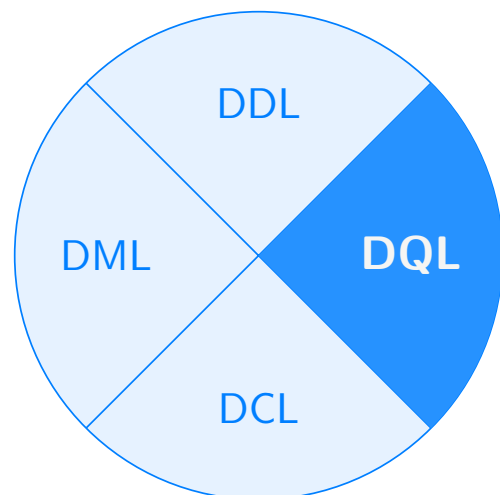
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Software/SQL/SQLFieldsDML



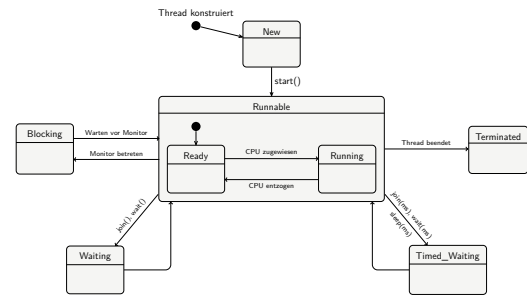
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Software/SQL/SQLFieldsDQL

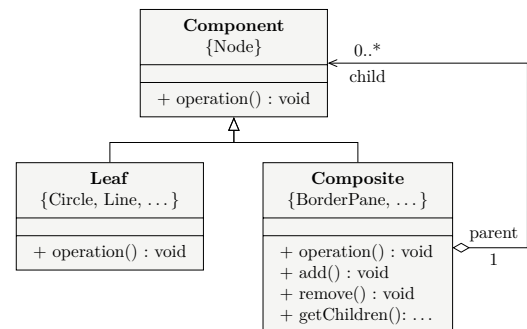




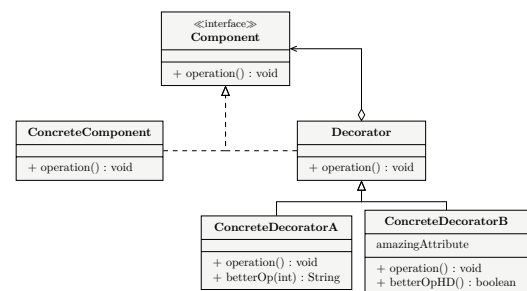
## Software/ThreadStates



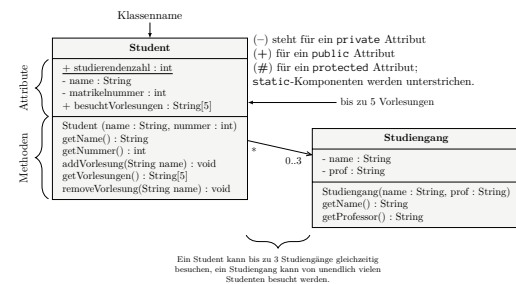
## Software/UML/UMLCompositePattern



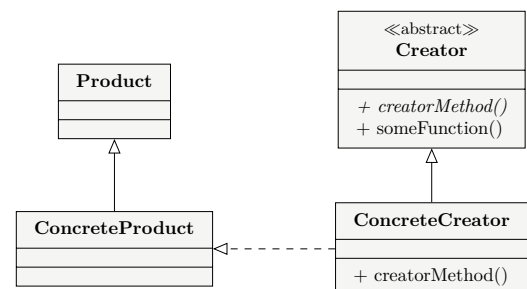
## Software/UML/UMLDecoratorPattern



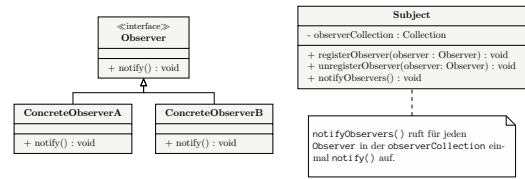
## Software/UML/UMLExample



## Software/UML/UMLFactoryPattern



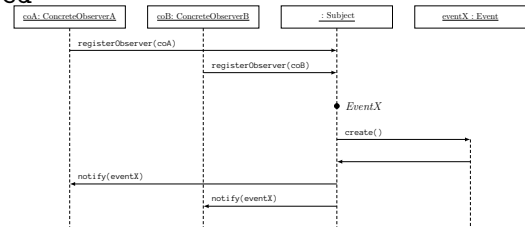
## Software/UML/UMLObserverPattern



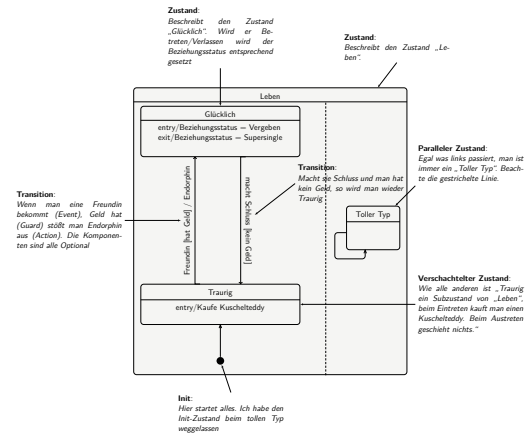
## Software/UML/UMLSEQObserverPattern



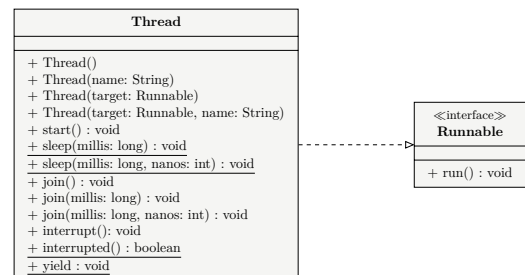
## Software/UML/UMLSEQObserverPatternAdapted



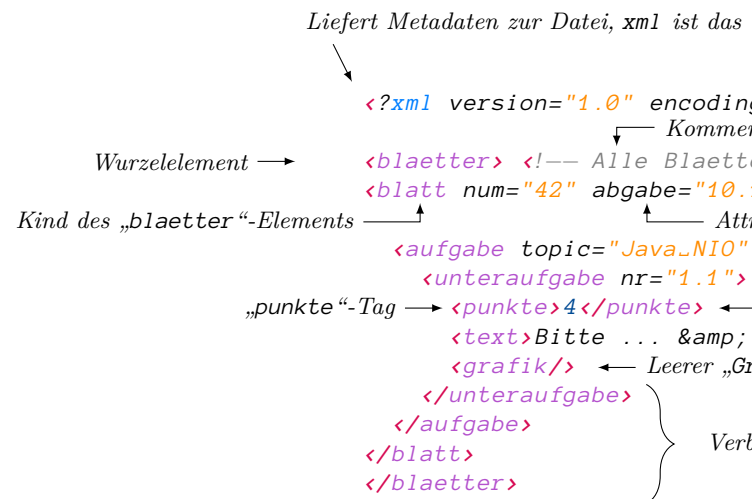
## Software/UML/UMLStateDiagramExample



## Software/UML/UMLThread



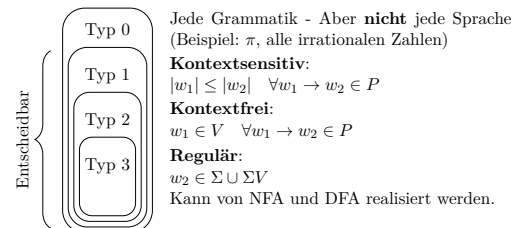
## Software/XML/XMLUebersicht



## Sprachen/CYKAlgorithmus

		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/ChomskyHierarchie



## Sprachen/Grammatik

