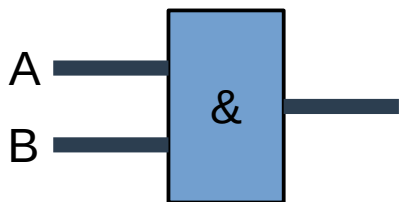


Digitaalloogika

Assistent Elmet Orasson
K2020

AND / NING / JA

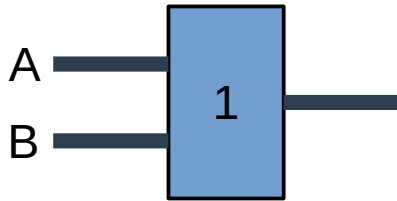
`if(A && B) then { }`



Loogiline korrutamine: $Y = A * B$

OR / VÕI

if(A || B) then { }

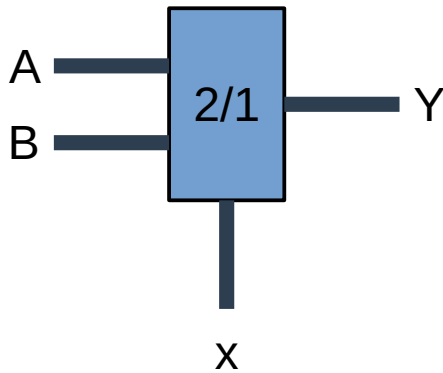


Loogiline liitmine: $Y = A + B$

Mõnel juhul ka kui $Y = (A+B \geq 1)$

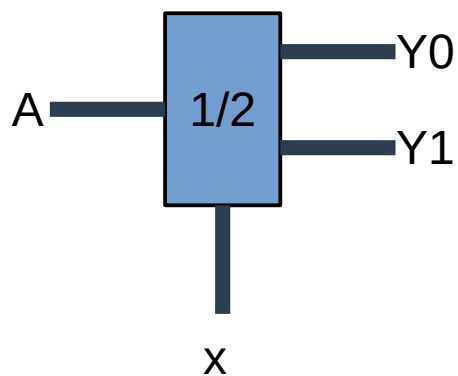
2/1 MUX / multiplexsor

if($x == 0$) then { $Y = A$
} else { $Y = B$ }



1/2 DMUX / demultiplexsor

```
if( x == 0 ) then { Y0 = A  
} else { Y1 = A }
```



DeMorgan'i seadus

$$\overline{A \vee B} = \overline{A} \wedge \overline{B}$$

$$\overline{A \wedge B} = \overline{A} \vee \overline{B}$$

Seda reeglit tarbitakse tavaliselt elementbaasi vahetusel koostöös teadmisega et

$$\overline{\overline{X}} = X$$

(M)DNK --> NING-EI (NAND)

(M)KNK --> VÕI-EI (NOR)