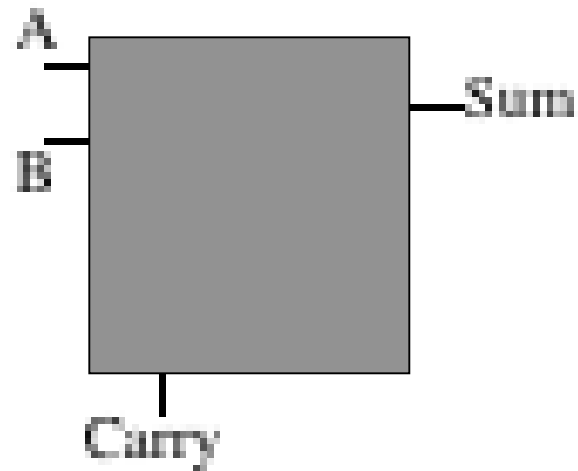


# At bygge logiske kredse af komponenter

Eksempel: En »halfadder«

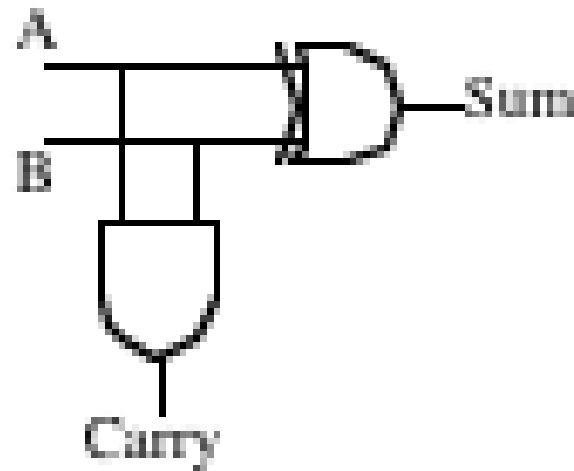
Lægge to bits A og B sammen:



# At bygge logiske kredse af komponenter

Eksempel: En »halfadder«

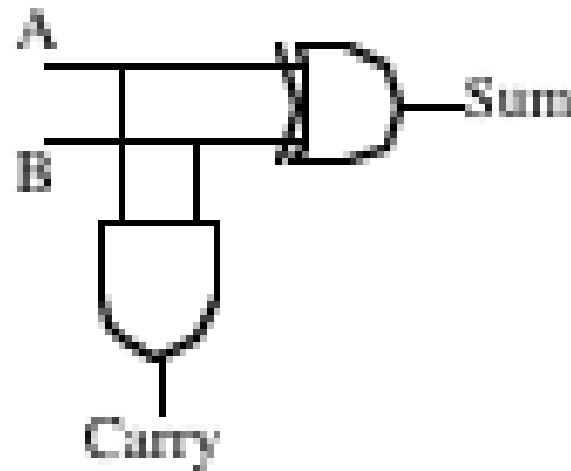
Lægge to bits A og B sammen:



# At bygge logiske kredse af komponenter

Eksempel: En »halfadder«

Lægge to bits A og B sammen:



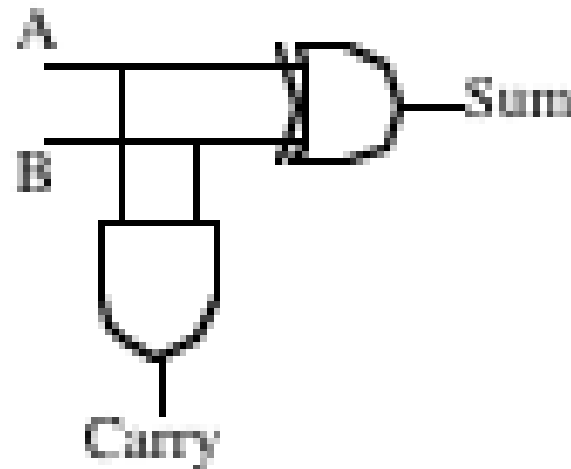
**halfadder(A, B, Carry, Sum) :-**



# At bygge logiske kredse af komponenter

Eksempel: En »halfadder«

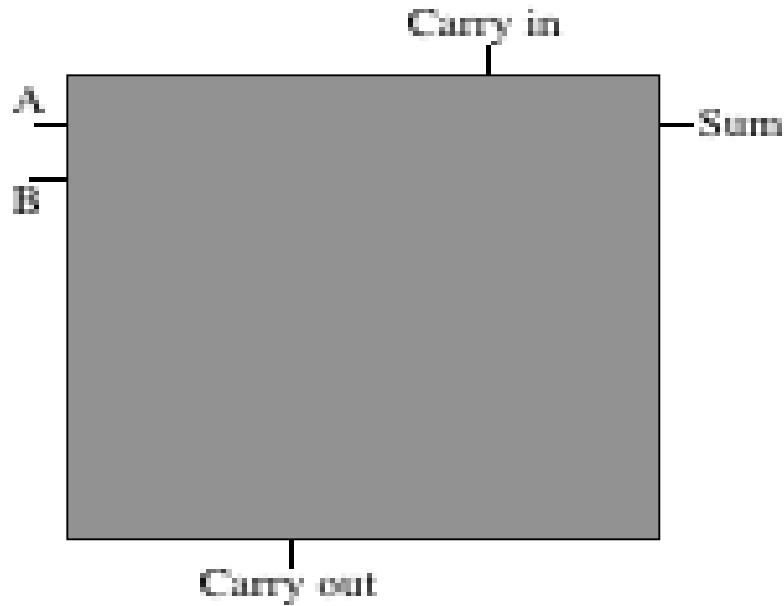
Lægge to bits A og B sammen:



```
halfadder(A, B, Carry, Sum) :-  
    and(A, B, Carry),  
    xor(A, B, Sum).
```

Bemærk: Analogi  
mellem Prolog-variabel  
og elektrisk leder

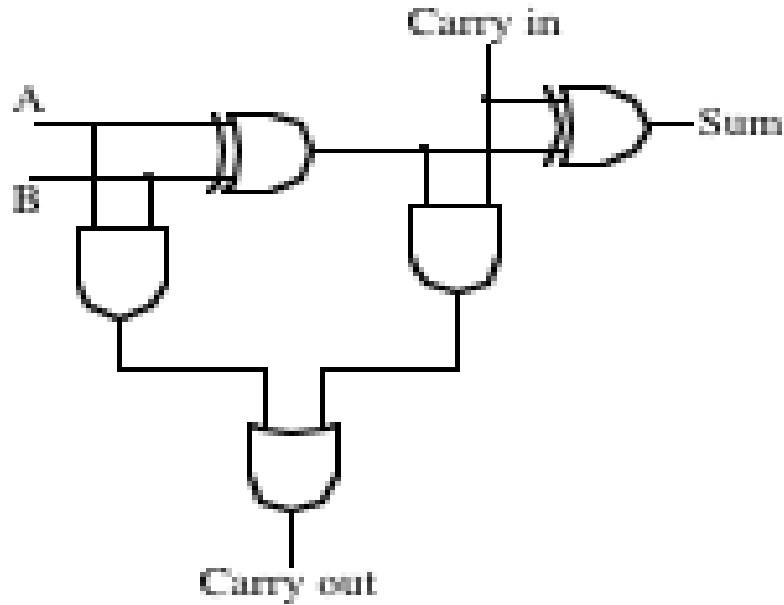
# En full-adder, nu med gammel mente



**fulladder(A, B, Carryin, Sum, Carryout):-**



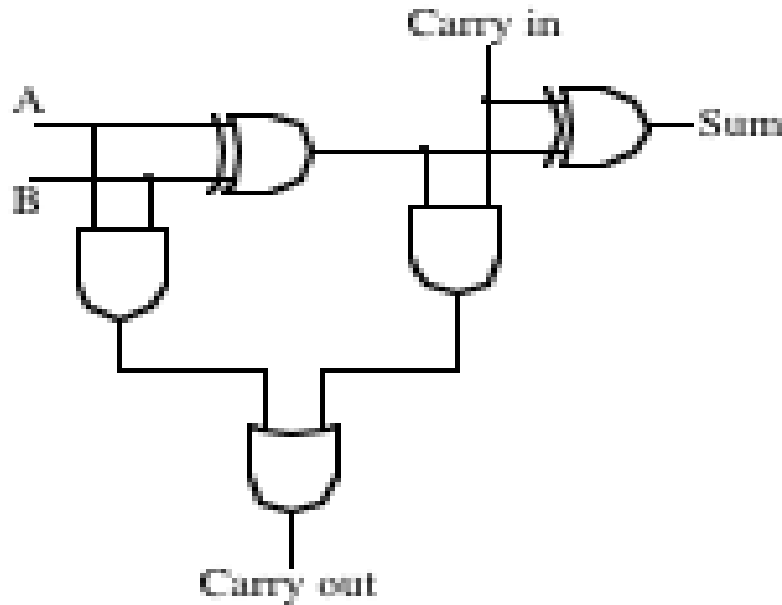
# En full-adder, nu med gammel mente



**fulladder(A, B, Carryin, Sum, Carryout):-**

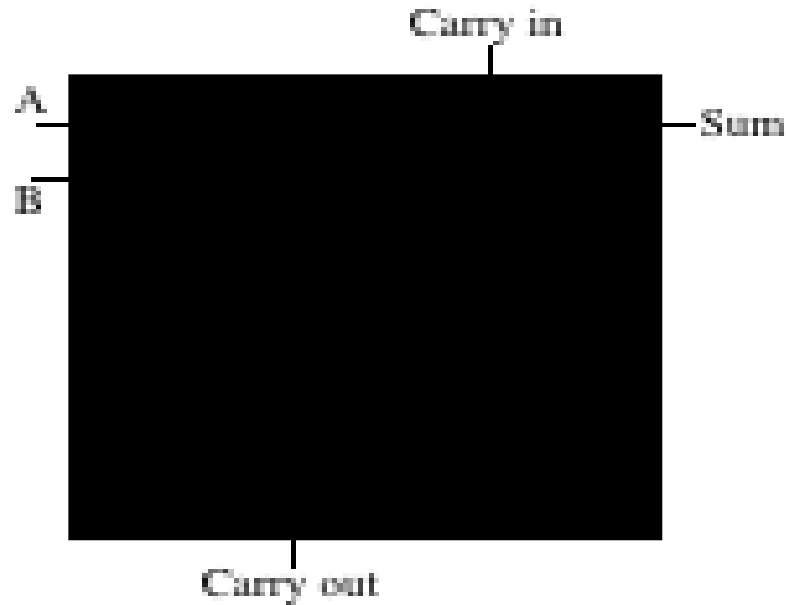


# En full-adder, nu med gammel mente



```
fulladder(A, B, Carryin, Sum, Carryout):-  
    xor(A, B, X),  
    and(A, B, Y),  
    and(X, Carryin, Z),  
    xor(Carryin, X, Sum),  
    or(Y, Z, Carryout).
```

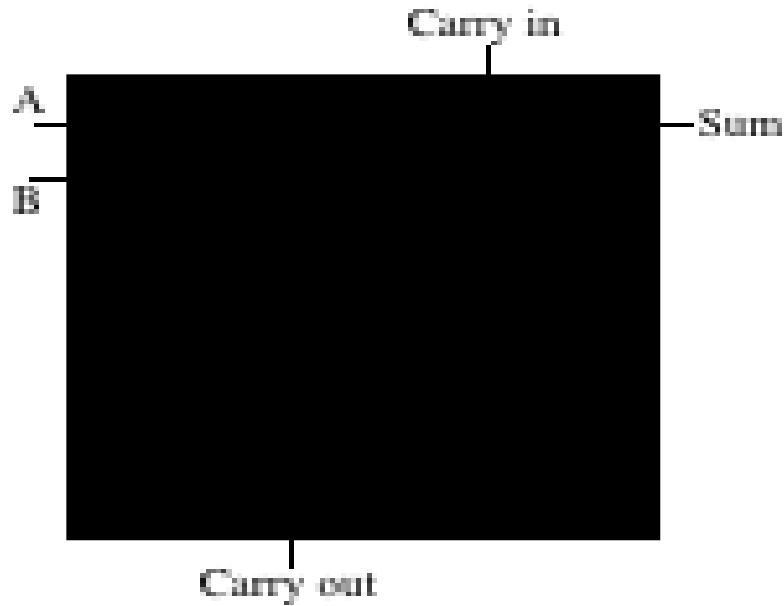
# En full-adder, nu med gammel mente



```
fulladder(A, B, Carryin, Sum, Carryout):-  
    xor(A, B, X),  
    and(A, B, Y),  
    and(X, Carryin, Z),  
    xor(Carryin, X, Sum),  
    or(Y, Z, Carryout).
```



# En full-adder, nu med gammel mente



**fulladder(A, B, Carryin, Sum, Carryout):-**

