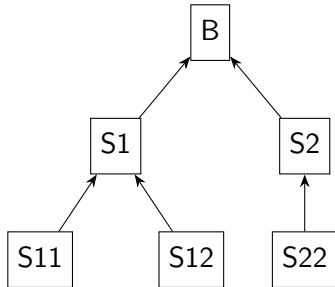


## Vererbungshierarchie



## Aufrufstelle

f( S11 , S2, B)

## Overload Set

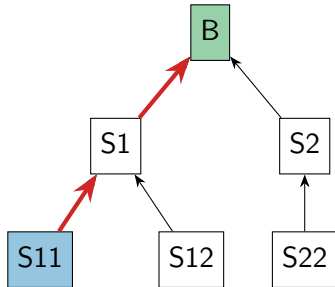
f( B , B , B )

f( S11 , B , int )

f( S11 , B , B )

## Score

## Vererbungshierarchie



## Aufrufstelle

f( S11, S2, B )

## Overload Set

f( B, B, B )

↓  
2

↓  
1

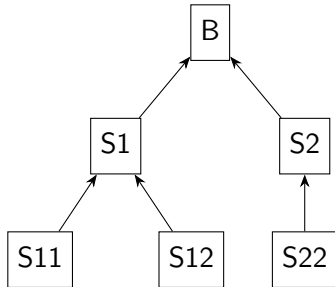
↓  
0

⇒  $\Sigma = 3$

f( S11, B, int )

f( S11, B, B )

## Vererbungshierarchie



## Aufrufstelle

f( S11 , S2, B)

## Overload Set

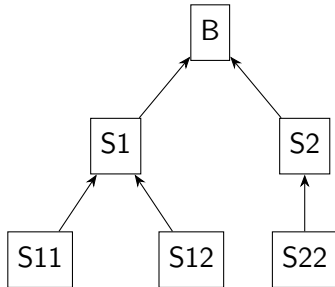
## Score

f( B , B , B )  
          ↓      ↓      ↓  
          2      1      0       $\Rightarrow \Sigma = 3$

f( S11 , B , int )

f( S11 , B , B )

## Vererbungshierarchie



## Aufrufstelle

f( S11 , S2, B)

## Overload Set

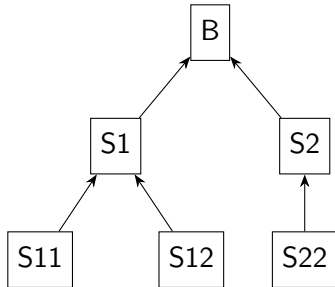
## Score

f( B , B , B )  
↓ ↓ ↓  
2 1 0  $\Rightarrow \Sigma = 3$

f( S11 , B , int )  
↓ ↓ ↓  
0 1  $\infty$   $\Rightarrow \Sigma = \infty$

f( S11 , B , B )

## Vererbungshierarchie



## Aufrufstelle

f( S11 , S2, B)

## Overload Set

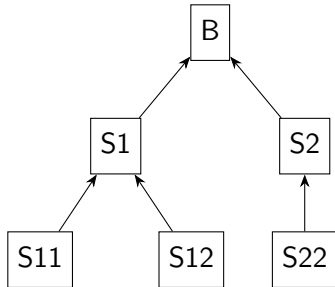
## Score

f( B , B , B )  
↓ ↓ ↓  
2 1 0  $\Rightarrow \Sigma = 3$

f( S11 , B , int )  
↓ ↓ ↓  
0 1  $\infty$   $\Rightarrow \Sigma = \infty$

f( S11 , B , B )

## Vererbungshierarchie



## Aufrufstelle

$f(S11, S2, B)$

## Overload Set

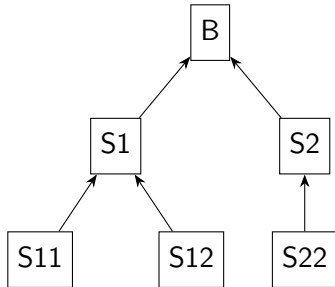
## Score

$$f\left(\begin{array}{c} \boxed{B} \\ \downarrow \\ 2 \end{array}, \begin{array}{c} \boxed{B} \\ \downarrow \\ 1 \end{array}, \begin{array}{c} \boxed{B} \\ \downarrow \\ 0 \end{array}\right) \Rightarrow \Sigma = 3$$

$$f\left(\begin{array}{c} \boxed{S11} \\ \downarrow \\ 0 \end{array}, \begin{array}{c} \boxed{B} \\ \downarrow \\ 1 \end{array}, \begin{array}{c} \boxed{\text{int}} \\ \downarrow \\ \infty \end{array}\right) \Rightarrow \Sigma = \infty$$

$$f\left(\begin{array}{c} \boxed{S11} \\ \downarrow \\ 0 \end{array}, \begin{array}{c} \boxed{B} \\ \downarrow \\ 1 \end{array}, \begin{array}{c} \boxed{B} \\ \downarrow \\ 0 \end{array}\right) \Rightarrow \Sigma = 1$$

## Vererbungshierarchie



## Aufrufstelle

$f(S11, S2, B)$

## Overload Set

$f(B, B, B) \Rightarrow \Sigma = 3$

Diagram showing the function call  $f(B, B, B)$  with arrows pointing from each argument to its score:  $B \rightarrow 2$ ,  $B \rightarrow 1$ ,  $B \rightarrow 0$ . The sum is  $\Sigma = 3$ .

$f(S11, B, \text{int}) \Rightarrow \Sigma = \infty$

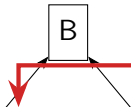
Diagram showing the function call  $f(S11, B, \text{int})$  with arrows pointing from each argument to its score:  $S11 \rightarrow 0$ ,  $B \rightarrow 1$ ,  $\text{int} \rightarrow \infty$ . The sum is  $\Sigma = \infty$ .

$f(S11, B, B) \Rightarrow \Sigma = 1$

Diagram showing the function call  $f(S11, B, B)$  with arrows pointing from each argument to its score:  $S11 \rightarrow 0$ ,  $B \rightarrow 1$ ,  $B \rightarrow 0$ . The sum is  $\Sigma = 1$ .



## Vererbungshierarchie



Wenn zwei Funktionen den gleichen Score haben, so wirft der Übersetzer einen Fehler.



## Aufrufstelle

f( S11 , S2, B)

## Overload Set

f( S1 , S2 , B )  
↓ ↓ ↓  
1 0 0  $\Rightarrow \Sigma = 1$

f( S11 , B , int )  
↓ ↓ ↓  
0 1  $\infty$   $\Rightarrow \Sigma = \infty$

f( S11 , B , B )  
↓ ↓ ↓  
0 1 0  $\Rightarrow \Sigma = 1$