

Coin Problem

Dynamic Programming

## Coin problem

Austrian Coin denom.

1 Schilling

5 "

10

20 "

25 "

$OPT(n)$  = opt. no. of coins to pay  
 $n$  Schillings

$$OPT(n) = \text{Min} \left( \begin{array}{l} OPT(n-1) + 1, \\ OPT(n-5) + 1, \\ OPT(n-10) + 1, \\ OPT(n-20) + 1, \\ OPT(n-25) + 1 \end{array} \right)$$