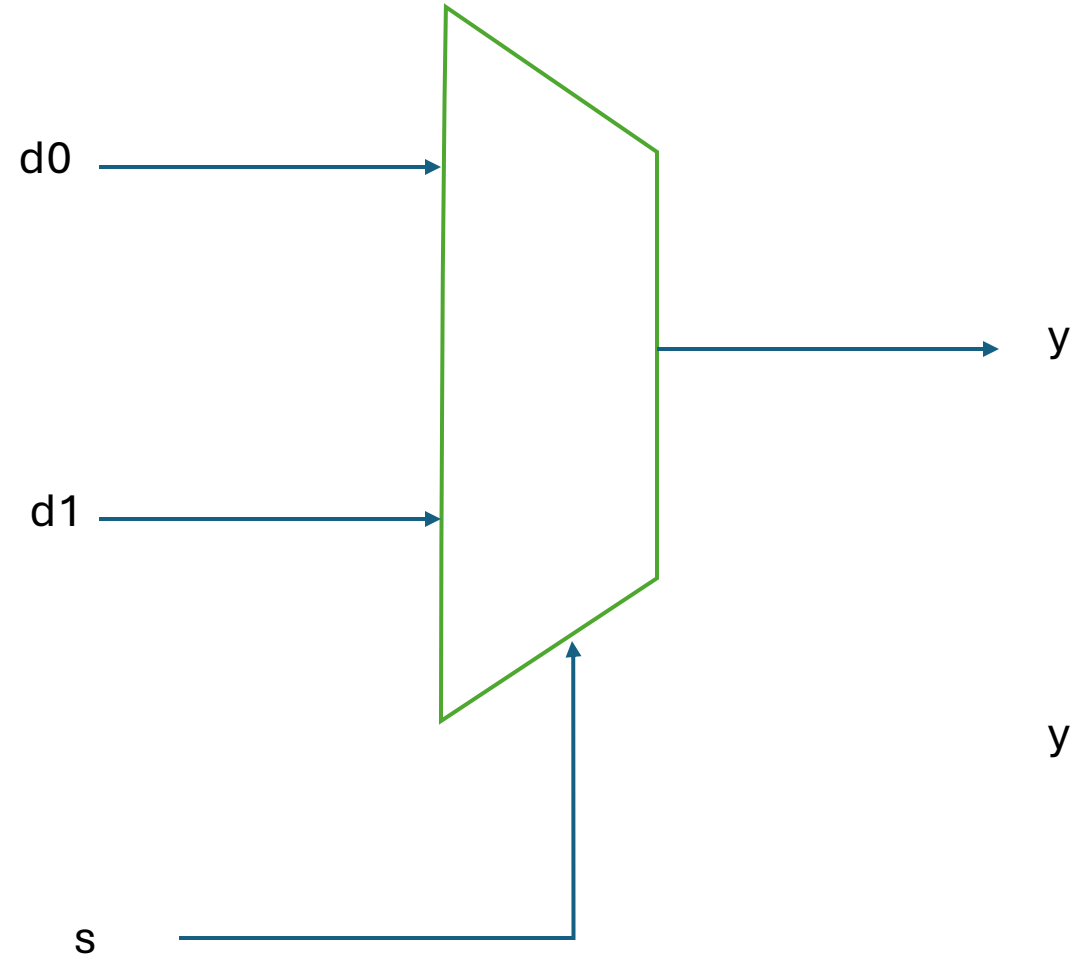


# Multiplexer

VHDL modeling



| $s$ | $y$  |
|-----|------|
| 0   | $d0$ |
| 1   | $d1$ |

$$y = ((\text{NOT } s) \text{ AND } d0) \text{ OR } (s \text{ AND } d1))$$

$$y = (\bar{s} \cdot d0) + (s \cdot d1)$$

# Types of VHDL description

- Behavioral
- Behavioral (check)
- Dataflow
- Structural

$$y = ( (\text{NOT } s) \text{ AND } d0) \text{ OR } (s \text{ AND } d1)$$

# Types of VHDL description

- Behavioral
- Dataflow
- Structural
- Dataflow (check)

$y \leq ((\text{NOT } s) \text{ AND } d0) \text{ OR } (s \text{ AND } d1);$

# Types of VHDL description

- Behavioral
- Dataflow
- **Structural**

- structural

$$y = ((\text{NOT } s) \text{ AND } d0) \text{ OR } (s \text{ AND } d1)$$

