$$
\begin{array}{ll}
\gg & \text { right shift } \\
\ll & \text { left shift }
\end{array}
$$



$$
\begin{array}{ll}
0011 & 3 \\
0110 & 6 \\
1100 & 12
\end{array}
$$




| $a$ | en | out |
| :--- | :--- | :--- |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

Multiplexer (mux) many to one




