$$
\begin{array}{rcl}
\text{Alice} & : & random\ a \in \mathbb{Z}_p^* \\
\text{Bob} & : & random\ b \in \mathbb{Z}_p^* \\
\text{Public} & : & generator\ g \in \mathbb{Z}_p^* \\
A \rightarrow B & : & g^a \\
B \rightarrow A & : & g^b \\
\text{Alice} & : & \text{computes } (g^b)^a = g^{ab} \\
\text{Bob} & : & \text{computes } (g^a)^b = g^{ab} \\
\text{Eve} & : & \text{knows } g^a, g^b, \text{cannot compute } g^{ab}
\end{array}
$$