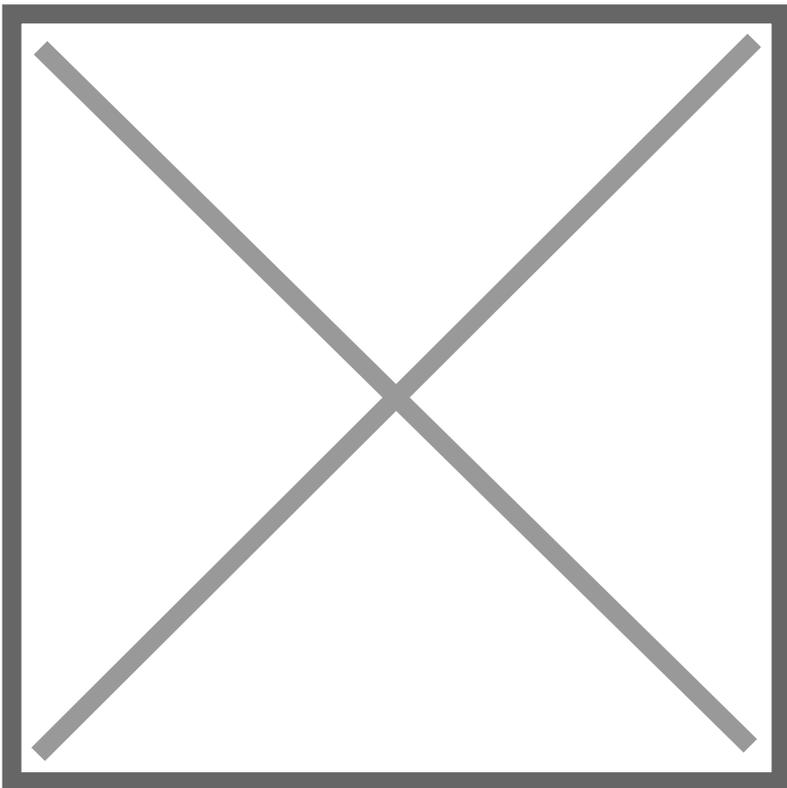


# Understanding DEMUX

Now it's your turn. **Create your own project** using different blocks. We suggest a **demultiplexer (DEMUX)**, which is the **opposite of a MUX**. It takes a **single input and distributes it to multiple outputs** based on a selection signal.

For example, a 1:2 DEMUX directs one input signal to one of two outputs based on the selection signal. Here is a visual representation of the DEMUX circuit:



## Task - Design a 1:2 DEMUX circuit following these guidelines:

1. Use one Input block for the main input and one for the selection input.
2. Add two Output blocks for the two outputs.
3. Use AND gates and a NOT gate to control the flow of the input signal to the appropriate output based on the selection input.
4. Hint: Refer to the MUX design steps for inspiration.