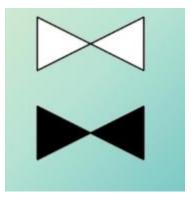
## **Furnace by Python**

Through this task you are asked to use Python to create a result like the video shared.

- 1. Add a furnace with Air inlet and fuel inlet
- 2. For both streams inlet add a valve (on/off valve), if the valve is on, flow is allowed. If the valve is off, the flow is stopped, and you will get an error message
- 3. The furnace has a temperature indicator to display the temperature inside the furnace and the equation that will be used is (indicator temperature = 25+ 0.25\*time in second)
- 4. The equation result will be printed each second (which means each 4 seconds, we will have 1 C rise in temperature)
- 5. For the fuel valve open, you need to add a picture displayed to show it's open like this one



6. For the furnace flame, it also needs to be changed according to the rise of the temperature. For example, if the temperature is from 25-100 degrees (flame 1 makes sense), for temperature > 300 degrees (flame 2 is better)





7. You can use any engineering knowledge that you have.

- 8. Please, track the number of hours you take to finish this task and send it with the final data.
- 9. It is recommended to submit your final reach by Thursday 29<sup>th</sup> of August 2024, send your final data to EIN WhatsApp 00201211189036