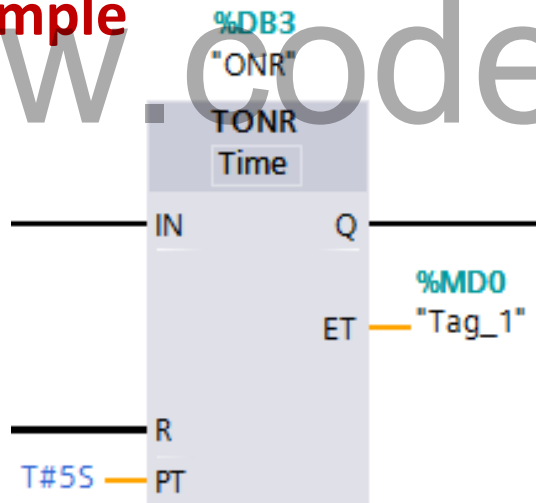


Siemens S7-1200

CPU 1212C AC/DC/Relay

Timer Operations (TONR)

- Retentive ON Delay
- **Exercise Example**



Code and Compile
Learning Made Easy

www.codeandcompile.com

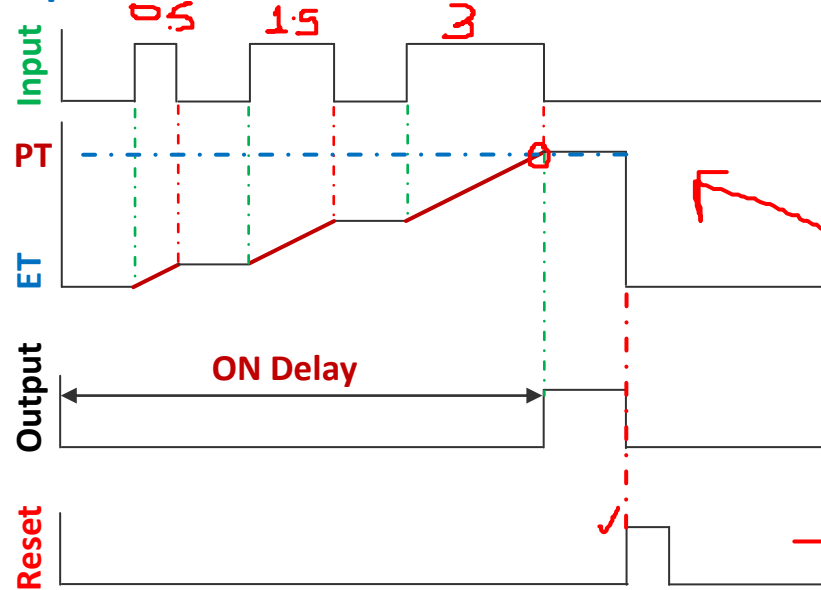
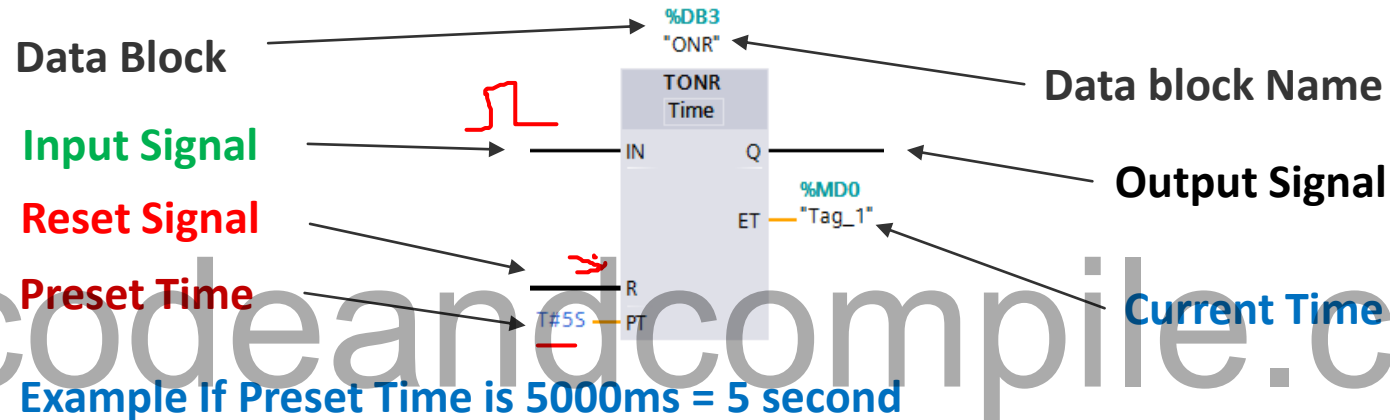


Timer Operations in LAD – TONR (Retentive ON Delay) </>

Retentive ON Delay

The **TONR timer** sets the **output (Q)** to **ON** after a **preset time delay**. The elapsed time is **accumulated** over multiple timing periods until the **reset (R)** input reset the elapsed time.

Basic instructions
Name
Timer operations
TP
TON
TOF
TONR



- Changing PT has **no effect** while the timer runs, but has **an effect** when the **timer resumes**.
- Changing IN to **FALSE**, while the timer runs, **stops the timer** but **does not reset the timer**. Changing IN back to **TRUE** will cause the **timer to start timing from the accumulated time value**.

DID YOU
KNOW

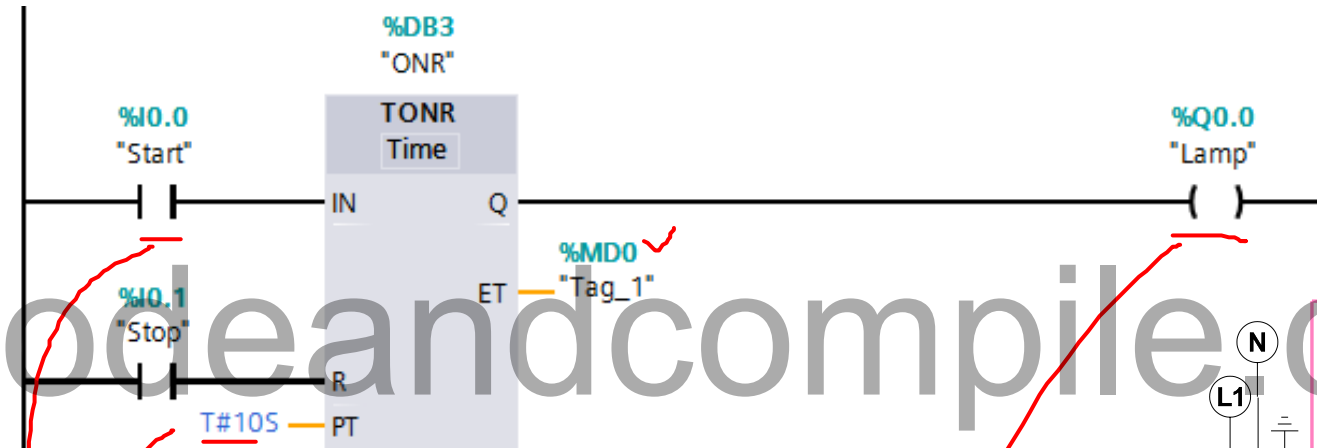


Exercise Example

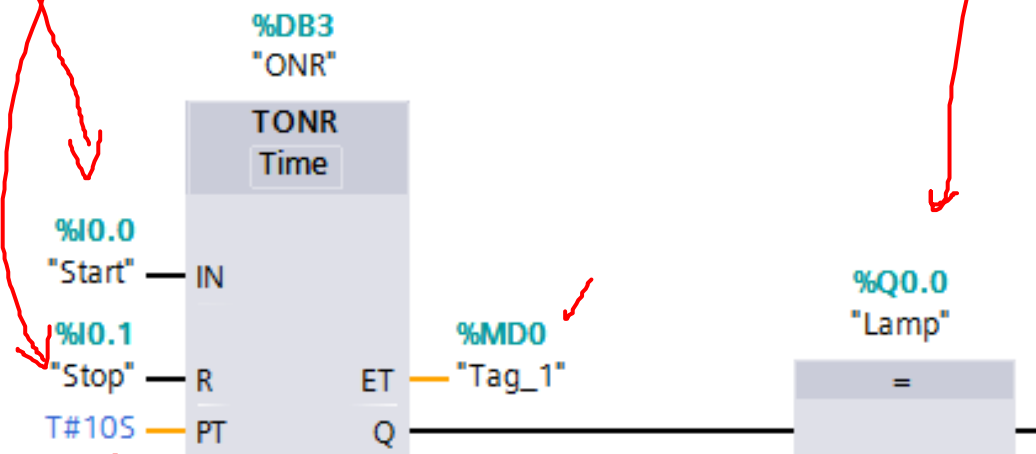


Write a Logic to energize an output Q0.0 with retentive timer considering PT to be 10 seconds.

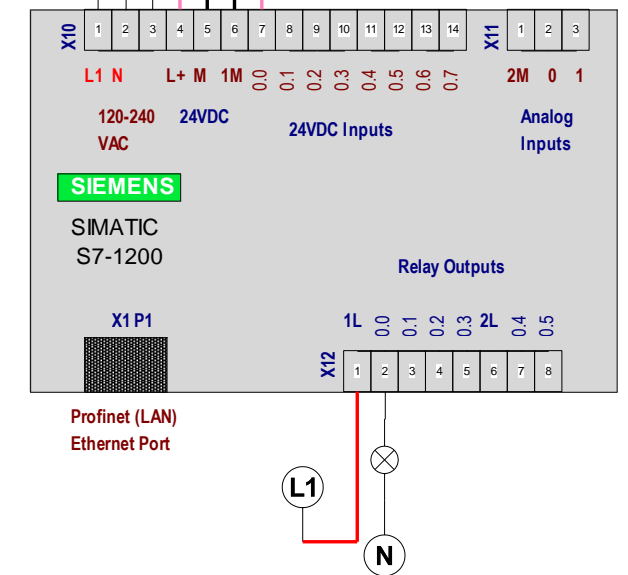
Ladder Solution



FBD Solution



PLC Wiring



What did we learn in this lesson?

- **TONR** is used to generate **Retentive ON** delay application.
- To **reset the timer** we need to give **signal (0 - 1)** to the **Reset input** of the timer

Thank you

*Get copy of this presentation
in the course!*



Code and Compile
Learning Made Easy

www.codeandcompile.com

