

TON and TOFF Instructions

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Harsha Priyanka

IIT Bombay

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Learning Objectives



Learning Objectives

- Delayed turn ON (TON) timer



Learning Objectives

- Delayed turn ON (TON) timer
- Delayed turn OFF (TOFF) timer



System Requirements



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- Ubuntu Linux 18.04 OS



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- **Ubuntu Linux 18.04 OS**
- **LDmicro**



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- **OpenPLC version 1 Mainboard**



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- **24V, 2A SMPS**



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- **Ubuntu Linux 18.04 OS**
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- **USBasp programmer**



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- **Ubuntu Linux 18.04 OS**
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- **OpenPLC version 1 Mainboard**
- **24V, 2A SMPS**
- **USBasp programmer**
- **Traffic Light module**



System Requirements

- Ubuntu Linux 18.04 OS
- LDmicro
- OpenPLC version 1 Mainboard
- 24V, 2A SMPS
- USBasp programmer
- Traffic Light module
- Switchboard module



Pre-requisites



Pre-requisites

- Working of a Contact and a Coil



Pre-requisites

- Working of a Contact and a Coil
- If not, please refer to the relevant tutorials in this series from <https://spoken-tutorial.org>



Prerequisites - Hardware setup



Delayed turn off timer



Delayed turn off timer

- When it is given logic 1 it outputs logic 1 immediately



Delayed turn off timer

- When it is given logic 1 it outputs logic 1 immediately
- When given logic 0 it takes at least the delay time provided to output logic 0



Delayed turn off timer

- Its variable counts up from zero in the units of PLC scan cycle



Code File - timeroff.ld



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- The files used in this tutorial are available in the Code Files link on this tutorial page



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- Please download and extract them



Code File - timeroff.ld

- The files used in this tutorial are available in the Code Files link on this tutorial page
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- Make a copy and then use them while practising



Summary

- Delayed turn ON (TON) timer
- Delayed turn OFF (TOFF) timer



Assignment

- Draw a ladder diagram to blink an LED
- Hint: Use both delayed turn ON and delayed turn OFF timers



About the Spoken Tutorial Project

- Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum questions

- Questions in THIS Spoken Tutorial?
- Visit <https://forums.spoken-tutorial.org/>
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer

You will have to register to ask questions



Forum for specific questions

- Questions not related to the Spoken Tutorial?
- Do you have general / technical questions on the Software?
- Please visit the FOSSEE Forum
<https://forums.fossee.in/>
- Choose the Software and post your question



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THANK YOU!

For more Information, visit our website
<https://fossee.in/>

