

Simple Loadable Module

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Learning Objective



Learning Objective

- **Implement a simple loadable module**



Learning Objective

- Implement a simple loadable module
- Create a **Makefile**



Learning Objective

- Implement a simple loadable module
- Create a **Makefile**
- Compile a module



System Requirements



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- **VirtualBox 5.2**



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- **Ubuntu Linux 18.04 LTS
Operating System**



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- **gedit text editor**



Prerequisites



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If not, then go through the C/C++ and Linux spoken tutorials on <https://spoken-tutorial.org>



gedit Installation



gedit Installation

- To proceed further, make sure that **gedit** is installed on your system



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- If not, to do the installation, follow the instructions in gedit series on <https://spoken-tutorial.org>



What is a kernel module?



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- Code that is added to the kernel at runtime is called a module
- It extends the functionality of the kernel without the need to reboot the system
- It communicates with the base kernel to complete their functions



Code Files - sample_module.c



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- Please download the file **simple_module.c** from the **Code Files** link of this tutorial



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- Please download the file **simple_module.c** from the **Code Files** link of this tutorial
- Make use of this file while practising



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- Please download the file **simple_module.c** from the **Code Files** link of this tutorial
- Make use of this file while practising
- Remember the file path



Summary

- **Implement a simple loadable module**
- **Create a Makefile**
- **Compile a module**



Assignment

- 1 Open the `simple_module.c` file
- 2 Change the module description using `MODULE_DESCRIPTION` macro
- 3 Run the `modinfo` command
- 4 See the output of description



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 Workshop

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates on passing online tests
- 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 questions

- **The Spoken Tutorial forum is for specific questions on this tutorial**
- **Please do not post unrelated and general questions on them**
- **This will help reduce the clutter**
- **With less clutter, we can use these discussions as instructional material**



Forum to specific questions

- Questions not related to the Spoken Tutorial?
- Do you have general / technical questions on the Embedded Linux Device Driver?
- 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/>

