

Task Description For GUI Users

A new pull request adds a ``grub_mini_cmd_rmmod`` function for the **Grub module Manager**. Also, it comes with a small unit test that reads some "insmod" / "rmmod" commands from stdin and executes them.

Function `grub_mini_cmd_insmod (char *name, char *deps)`: check its dependencies and insert a module with name.

- This name should not exist and all its dependencies should already be inserted.
- if same name module existed, this function will return `GRUB_ERR_BAD_MODULE`
- if any dependence is missed, this function will return `GRUB_ERR_NO_DEP`.
- ``deps`` is a string list split by a null char and ends with a empty string. e.g
`"A\0B\0C\0\0" = ["A", "B", "C"]`

Function `grub_mini_cmd_rmmod (char *name)`: remove a module with name.

- This module should exist and no others depend on it.
- if no module is found with name, this function will return `GRUB_ERR_BAD_ARGUMENT`
- if any other depends on it, this function will print a warning and do nothing.

Function `grub_mini_cmd_lsmod()`: display the list of inserted modules and their reference counter.

Your task is to review the new code and add some input to complete this unit test./p>

If any input will cause any crash or memory error, please report it.

Compile Instruction

To compile the source code: (keep flags unchanged to help SeDBG analyze the debug symbol)

```
gcc main.c -g -Wall -gdwarf-4 -o main_sedbg
```

Tools Allowed

SeDBG

Task Description For API Users

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Function `grub_mini_cmd_rmmod (char *name)`: remove a module with name.

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Function `grub_mini_cmd_lsmod()`: display the list of inserted modules and their reference counter.

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Compile Instruction

To compile the source code: (you can add more compiler flags if you need)

```
gcc main.c -g -Wall -gdwarf-4 -o main_angr
```

Tools Allowed

Write a python script with angr or your preferred symbolic execution tool to solve the task.
SeDBG is NOT allowed

Angr python virtual environment are available at `/opt/.virtualenvs/angr/bin/`

To active venv: `source /opt/.virtualenvs/angr/bin/activate`