# **Assignment 3**

# 修改内容

```
diff --git a/linux/samples/rust/Kconfig b/linux/samples/rust/Kconfig
index 189c10ced.. 066134d24 100644
— a/linux/samples/rust/Kconfig
+++ b/linux/samples/rust/Kconfig
രാ −163,4 +163,9 രാ config SAMPLE_RUST_SELFTESTS
         If unsure, say N.
+config SAMPLE RUST HELLOWORLD
       tristate "hello world"
         simple hello world module from rust.
endif # SAMPLES RUST
diff --git a/linux/samples/rust/Makefile b/linux/samples/rust/Makefile
index 420bcefeb.. 3576994a9 100644
— a/linux/samples/rust/Makefile
+++ b/linux/samples/rust/Makefile
രാ −15,5 +15,6 രാ obj-$(CONFIG SAMPLE RUST NETFILTER)
rust netfilter.o
obj-$(CONFIG SAMPLE RUST ECHO SERVER)
                                              += rust echo server.o
obj-$(CONFIG_SAMPLE_RUST_FS)
                                              += rust fs.o
obj-$(CONFIG SAMPLE RUST SELFTESTS)
                                              += rust selftests.o
+obj-$(CONFIG SAMPLE RUST HELLOWORLD)
                                              += rust helloworld.o
subdir-$(CONFIG SAMPLE RUST HOSTPROGS)
                                             += hostprogs
```

## 操作记录

1. 在 menuconfig 中启用模块

```
.0-rc1 Kernel Configuratio
Arrow keys navigate the menu. <Enter> selects submenus \longrightarrow (or empty submenus \longrightarrow). Highlighted letters are hotkeys. Pressing <Y> includes, <N> excludes, <M> modularizes features. Press <Esc><Esc> to exit, <?> for Help, </> for Search. Legend: [*] built-in [ ] excluded <M> module <> module capable
                                      Printing macros (NEW)
                            < >
                                     Module parameters (NEW)
                                     Synchronisation primitives (NEW)
                            < >
                                      haracter device (NEW)
                                     Miscellaneous device (NEW)
Stack probing (NEW)
                            < >
                                     Semaphore (NEW)
Semaphore (in C, for comparison) (NEW)
                                     Random (NEW)
                                     Platform device driver (NEW)
                                     File system (NEW)
                                     Network filter module (NEW)
                                      Echo server module (NEW)
                                     Host programs (NEW)
                                     Self tests (NEW)
                                  hello world
                                       <Select>
                                                        < Exit >
                                                                          < Help >
                                                                                           < Save >
                                                                                                              < Load >
```

#### 2. 重新编译

### 3. 进入系统,载入模块

### 4. dmesg 查看模块输出

```
| 1.253279| cdrom: Uniform CD-ROM driver Revision: 3.20
| 1.271555| sr 1:0:0:0: Attached scsi CD-ROM sr0
| 1.277674| sr 1:0:0:0: Attached scsi generic sg0 type 5
| 1.687674| input: ImEXPS/2 Generic Explorer Mouse as /devices/platform/i8042/serio1/input/input3
| 1.916198| tsc: Refined TSC clocksource calibration: 3494.369 MHz
| 1.916424| clocksource: tsc: mask: 0xfffffffffffffffmax_cycles: 0x325e898e869, max_idle_ns: 440795322940 ns | |
| 1.916587| clocksource: Switched to clocksource stsc: di.0.12586| cfg80211: Loading compiled—in X.509 certificates for regulatory database |
| 14.053204| modprobe (67) used greatest stack depth: 14272 bytes left |
| 14.063137| platform regulatory.0: Direct firmware load for regulatory.db failed with error -2 |
| 14.063486| cfg80211: failed to load regulatory.db |
| 14.064493| ALSA device list: |
| 14.064586| No soundcards found. |
| 14.106044| freeing unused kernel image (initmem) memory: 1328K |
| 14.107922| Write protecting the kernel read-only data: 24576k |
| 14.112798| Freeing unused kernel image (codata/data gap) memory: 2032K |
| 14.112798| Freeing unused kernel image (rodata/data gap) memory: 2032K |
| 14.1232067| x86/mm: Checked W+X mappings: passed, no W+X pages found. |
| 14.232309| with arguments: |
| 14.232339| with environment: |
| 14.232402| HOME=/ |
| 14.232402| HOME=/ |
| 14.232402| TERM=Linux |
| 14.232402| TERM=Linux |
| 14.232402| TERM=Linux |
| 14.232402| TERM=Linux |
| 14.233933| mount (72) used greatest stack depth: 13920 bytes left |
| 14.333937| mew (74) used greatest stack depth: 13920 bytes left |
| 17.301399| dmesg (82) used greatest stack depth: 13720 bytes left |
| 17.301399| dmesg (82) used greatest stack depth: 13720 bytes left |
| 17.301399| dmesg (82) used greatest stack depth: 13720 bytes left |
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```