

### 1. Command 'make'

```
root@liavan:/home/user/linux/hw2# make
make -C /lib/modules/3.19.0/build M=/home/user/linux/hw2 modules
make[1]: Entering directory `/home/user/linux'
  CC [M]  /home/user/linux/hw2/hello.o
  CC [M]  /home/user/linux/hw2/hello.o
  CC [M]  /home/user/linux/hw2/hello.o
Building modules, stage 2.
MODPOST 3 modules
  CC      /home/user/linux/hw2/hello.mod.o
  LD [M]  /home/user/linux/hw2/hello.ko
  CC      /home/user/linux/hw2/hello.mod.o
  LD [M]  /home/user/linux/hw2/hello.ko
  CC      /home/user/linux/hw2/hello.mod.o
  LD [M]  /home/user/linux/hw2/hello.ko
  CC      /home/user/linux/hw2/hello.mod.o
  LD [M]  /home/user/linux/hw2/hello.ko
make[1]: Leaving directory `/home/user/linux'
```

### 2. Command 'lsmod | grep hello' before removal

```
root@liavan:/home/user/linux/hw2# lsmod | grep hello
hello3                12790  0
hello                 12719  0
hello                 12496  0
```

### 3. Command 'insmod' and 'dmesg' before removal (a=3 b=2 c=mytext) (howmany=2 whom="IIS")

```
[ 18.745880] 08:56:54.729234 vminfo Error: Unable to connect to system D-Bus
(2/3): D-Bus not installed
[ 23.747332] 08:56:57.150742 vminfo Error: Unable to connect to system D-Bus
(3/3): D-Bus not installed
[ 43.682278] audit: type=1400 audit(1709715437.091:62): apparmor="STATUS" operation="profile_replace" name="/usr/lib/cups/backend/cups-pdf" pid=1768 comm="apparmor_parser"
[ 43.682282] audit: type=1400 audit(1709715437.091:63): apparmor="STATUS" operation="profile_replace" name="/usr/sbin/cupsd" pid=1768 comm="apparmor_parser"
[ 43.682475] audit: type=1400 audit(1709715437.091:64): apparmor="STATUS" operation="profile_replace" name="/usr/sbin/cupsd" pid=1768 comm="apparmor_parser"
[ 101.301355] ISO 9660 Extensions: Microsoft Joliet Level 3
[ 101.305366] ISO 9660 Extensions: RRIP_1991A
[ 371.403902] Hello, world
[ 376.546786] (0) Hello, IIS
[ 376.546788] (1) Hello, IIS
[ 381.595122] (0) iterations, mytext
[ 381.595125] (1) iterations, mytext
[ 381.595126] (2) iterations, mytext
[ 381.595127] (3) iterations, mytext
[ 381.595128] (4) iterations, mytext
[ 381.595129] (5) iterations, mytext
root@liavan:/home/user/linux/hw2#
```

4. Command '`dmesg`' after removal, which showing module\_exit result.

```
[ 23.747332] 08:50:57.150742 VMtoolsd - Error: Unable to connect to system D-B
[ 43.682278] audit: type=1400 audit(1709715437.091:62): apparmor="STATUS" op
[ 43.682282] audit: type=1400 audit(1709715437.091:63): apparmor="STATUS" op
[ 43.682475] audit: type=1400 audit(1709715437.091:64): apparmor="STATUS" op
[ 101.301355] ISO 9660 Extensions: Microsoft Joliet Level 3
[ 101.305366] ISO 9660 Extensions: RRIP_1991A
[ 371.403902] Hello, world
[ 376.546786] (0) Hello, IIS
[ 376.546788] (1) Hello, IIS
[ 381.595122] (0) iterations, mytext
[ 381.595125] (1) iterations, mytext
[ 381.595126] (2) iterations, mytext
[ 381.595127] (3) iterations, mytext
[ 381.595128] (4) iterations, mytext
[ 381.595129] (5) iterations, mytext
[ 650.931580] Goodbye, cruel world
[ 656.820071] Goodbye, cruel world
[ 660.006570] Goodbye, Watame shusi from hellop3
root@liavan:/home/user/linux/hw2#
```

5. Command '`rmmod`' and '`lsmod | grep hello`' after removal

```
root@liavan:/home/user/linux/hw2# rmmod hellop
root@liavan:/home/user/linux/hw2# rmmod hello
root@liavan:/home/user/linux/hw2# rmmod hellop3
root@liavan:/home/user/linux/hw2# lsmod | grep hello
root@liavan:/home/user/linux/hw2#
```