

# listtaskslinear.c

A kernel module that iterates through all tasks in the system using the `for_each_process()` macro.

## Getting Started

### Environmental dependencies

OS: CentOS-8.1.1911-x86\_64

Kernels: 4.18.0-147.5.1.el8\_1.x86\_64

Language: C

### Please check Makefile.

My Makefile include this information.

```
# at first type on ur terminal that $(uname -r) then u will get the version..
# that is using on ur system

obj-m += <program name>.o
KDIR =/usr/src/kernels/4.18.0-147.5.1.el8_1.x86_64 //my kernel locaiton

all:
    $(MAKE) -C $(KDIR) SUBDIRS=$(PWD) modules

clean:
    rm -rf *.o *.ko *.mod.* *.symvers *.order
```

### Run Steps

```
make
insmod listtaskslinear.ko
dmesg
rmmod listtaskslinear.ko
dmesg
```

### How to check?

```
dmesg
```

### Screenshots

```
[root@localhost ~]# make
make -C /usr/src/kernels/4.18.0-147.5.1.el8_1.x86_64 SUBDIRS=/root modules
make[1]: Entering directory '/usr/src/kernels/4.18.0-147.5.1.el8_1.x86_64'
Building modules, stage 2.
MODPOST 1 modules
WARNING: modpost: missing MODULE_LICENSE() in /root/listtaskslinear.o
see include/linux/module.h for more information
make[1]: Leaving directory '/usr/src/kernels/4.18.0-147.5.1.el8_1.x86_64'
[root@localhost ~]#
```

```
[ 3796.783987] PID: 3672 | NAME: kworker/3:0 | STATE: 1026
[ 3796.783988] PID: 3684 | NAME: gedit | STATE: 1
[ 3796.783988] PID: 3927 | NAME: kworker/0:3 | STATE: 1026
[ 3796.783989] PID: 3965 | NAME: kworker/2:1 | STATE: 1026
[ 3796.783990] PID: 3991 | NAME: kworker/2:3 | STATE: 1026
[ 3796.783990] PID: 4046 | NAME: kworker/0:0 | STATE: 1026
[ 3796.783991] PID: 4048 | NAME: kworker/1:3 | STATE: 1026
[ 3796.783991] PID: 4585 | NAME: kworker/2:0 | STATE: 1026
[ 3796.783992] PID: 4620 | NAME: kworker/u256:3 | STATE: 1026
[ 3796.783993] PID: 5155 | NAME: kworker/1:1 | STATE: 1026
[ 3796.783994] PID: 5210 | NAME: sleep | STATE: 1
[ 3796.783994] PID: 5721 | NAME: kworker/0:1 | STATE: 1026
[ 3796.783995] PID: 5722 | NAME: kworker/2:2 | STATE: 1026
[ 3796.783995] PID: 5723 | NAME: insmod | STATE: 0
[ 3796.783996] Module loaded.
```

```
3796.783994] PID: 5721 | NAME: kworker/0:1 | STATE: 1026
3796.783995] PID: 5722 | NAME: kworker/2:2 | STATE: 1026
3796.783995] PID: 5723 | NAME: insmod | STATE: 0
3796.783996] Module loaded.
3818.877215] Removing module.
3818.877216] Module removed.
root@localhost ~]#
```

## How to contact me?

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