

birthdaylinkedlist.c

This module create a linked list containing five struct_birthday elements, then output its contents to the kernel log buffer.

Environmental dependencies

OS: CentOS-8.1.1911-x86_64

Kernels: 4.18.0-147.5.1.el8_1.x86_64

Installation

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
```

and then make.

```
make
```

Usage

```
insmod birthdaylinkedlist.ko  
dmesg  
rmmod birthdaylinkedlist.ko  
dmesg
```

Trace

```
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/birthdaylinkedlist.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 ~]#
```

```
[ 1695.641040] Loading module.
[ 1695.641041] Creating list.
[ 1695.641042] NAME:Tsz Kin Lee BIRTHDAY: 1998 / 2 / 9
[ 1695.641043] NAME:Ann Mi BIRTHDAY: 1998 / 2 / 9
[ 1695.641043] NAME:Andy Lau BIRTHDAY: 1978 / 9 / 3
[ 1695.641044] NAME:Judy Chan BIRTHDAY: 1990 / 3 / 15
[ 1695.641044] NAME:Cheng Chi BIRTHDAY: 1996 / 5 / 4
```

```
[ 1695.641042] NAME:Tsz Kin Lee BIRTHDAY: 1998 / 2 / 9
[ 1695.641043] NAME:Ann Mi BIRTHDAY: 1998 / 2 / 9
[ 1695.641043] NAME:Andy Lau BIRTHDAY: 1978 / 9 / 3
[ 1695.641044] NAME:Judy Chan BIRTHDAY: 1990 / 3 / 15
[ 1695.641044] NAME:Cheng Chi BIRTHDAY: 1996 / 5 / 4
[ 1739.441751] Removing module.
[ 1739.441754] Removing Birthday [NAME:Tsz Kin Lee Birthday: 1998 / 2 / 9]
[ 1739.441754] Removing Birthday [NAME:Ann Mi Birthday: 1998 / 2 / 9]
[ 1739.441755] Removing Birthday [NAME:Andy Lau Birthday: 1978 / 9 / 3]
[ 1739.441756] Removing Birthday [NAME:Judy Chan Birthday: 1990 / 3 / 15]
[ 1739.441756] Removing Birthday [NAME:Cheng Chi Birthday: 1996 / 5 / 4]
```

Contact

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