Xilinx Zynq FPGA, TI DSP MCU 기반의

프로그래밍 및 회로 설계 전문가

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Step 1. Make a directory for downloading the kernel

from home,

->mkdir kernel

and

->cd kernel

Step 2. Download the linux kenel(select a version u want)

->wget https://mirrors.edge.kernel.org/pub/linux/kernel/v4.x/linux-4.4.tar.gz

cf. wget : get from a web

Step 3. Extract tar.gz u've just downloaded.

->tar zxvf linux-4.4.tar.gz

After unpacking, u can find a directory, linux-4.4.tar.gz

->cd linux-4.4.tar.gz

In this directory, there are 30files.(If not, download again)

Step 4. Install ctags and cscope

In the directory, linux-4.4(~/kernel/linux-4.4)

->sudo apt-get install ctags cscope

Step 5. Edit the file ".vimrc" and make a file "mkcscope.sh"

-> vi ~/.vimrc

-> vi ~/mkcscope.sh

Refer to the attached files for the details(U don't have to type by yourself)

You must change address of these sections, "set tags=" and "cs add".

Step 6. Set up tags

In linux-4.4(~/kernel/linux-4.4)

-> ctags -R

It may take some time. Don't be nervous.

Step 7. Set up cscope

In home(in this directory, there is the file, mkcscope.sh)

-> chmod 755 ~/mkcscope.sh

a color of the file changed to green.

-> sudo ~/mkcscope.sh /usr/local/bin/   OR   -> sudo ~/mkcscope.sh /usr/local/bin

When this is finished, type ctrl + d.

Finally, in linux-4.4

-> mkcscope.sh

Step 8. Try

Congraturations!! Felicidades!!

It's finished. So swim the sea of kernel.

e.g in linux-4.4

-> vi -t task_struct

https://medium.freecodecamp.org/building-and-installing-the-latest-linux-kernel-from-source-6d8df5345980

vimrc

```
set nu
set ts =4

"ctags setting"
set tags=/home/fstopdg/kernel/linux-4.4/tags
if version >= 500
func! Sts()
    let st = expand("<cword>")
    exe "sts ".st
endfunc
nmap ,st :call Sts()<cr>
func! Tj()
    let st = expand("<cword>");
    exe "tj ".st
endfunc
nmap ,tj :call Tj()<cr>
endif

"cscope setting"
set csprg =/usr/bin/cscope
set nocsverb
cs add /home/fstopdg/kernel/linux-4.4/cscope.out
set csto =0
set cst
func! Css()
    let css = expand("<cword>");
    new
    exe "cs find s".css
    if getline(1) == ""
        exe "q!"
    endif
endfunc
```

```
nmap ,css :call Css()<cr>

func! Css()
    let csc = expand("<cword>");
    new
    exe "cs find c ".csc
    if getline(1) == ""
        exe "q!"
    endif
endfunc
nmap ,csc :call Csc<cr>
func! Csd()
    let csd = expand("<cword>");
    new
    exe "cs find d".csd
    if getline(1) == ""
        exe "q!"
    endif
endfunc
nmap ,csd :call Csd()<cr>

func! Csg()
    let csg = expand("<cword>");
    new
    exe "cs find g ".csg
    if getline(1) == ""
        exe "q!"
    endif
endfunc
nmap ,csg :call Csg()<cr>
```

mkcscop.sh

1 #!/bin/sh
2 rm -rf cscope.files cscope.files
3 find . ₩(-name '*.c' -o -name '*.cpp' -o -name '*.cc' -o -name '*.h' -o -na me '*.S' ₩) -print >cscope.files
4 cscope -i cscope.files

#!/bin/sh
rm -rf cscope.files cscope.files
find . ₩(-name '*.c' -o -name '*.cpp' -o -name '*.cc' -o -name '*.h' -o -name '*.S' ₩) -print >cscope.files
cscope -i cscope.files

커널 설치 후

sudo apt-get install screen

선생님 강의 폴더 git 한 후

sudo insmod monitor_hack.ko 설치

make 하면
화면 gg

screen -a 로 진입

ctrl +ac -> 화면을 포인팅 한다

ctrl +aa -> 포인팅 한 위치로 바로 이동 !