Hope you can avoid what I ran in to. Two things: "Anti-Virus" & "USB Drive".
Takes a huge amount of time. It's not my system. So, I had to muddle thru.
But I did install Vidado WebPACK 2018/3 successfully. Lot of screenshots.

Love,
Dad
(Your Father)


```
git clone https://BriteLight@bitbucket.org/BriteLight/fpga4fun.git
Cloning into 'fpga4fun'...
Password for 'https://BriteLight@bitbucket.org':
remote: Counting objects: 3, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0)
Unpacking objects: 100% (3/3), done.

cd fpga4fun/


ls -l
total 1392
-rw-r--r-- 1 Brad None 1407991 Feb  2 12:59 Homework-Project1.pdf
-rw-r--r-- 1 Brad None    2622 Feb  4 20:25 README.md


git add -A

git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git reset HEAD< file>..." to unstage)

        new file:   Homework-Project1.pdf

[Brad@Computer2 ~/<4>HowardULAB/fpga4fun]$ git commit -m "Project 1"
[master 4089270] Project 1
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Homework-Project1.pdf
```


```
ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/Brad/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/Brad/.ssh/id_rsa.
Your public key has been saved in /home/Brad/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:At4Wi3X+IwucjOXXRB6G5cDHZUjx7O5Lbe25wOoSKrk Brad@Computer2
The key's randomart image is:
+---[RSA 2048]----+
|        ..=*o+o   |
|         o*++  o  |
|    . o .  .+  .  |
|   . = =   o . .  |
|    o = S . . .|  |
|     o + + .   + |
|    = + +  o o+ |
|    o * + .. ooo |
|    E+ o oo   ++|
+----[SHA256]-----+


[Brad@Computer2 ~/.ssh]$ cat id_rsa.pub
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAAABAQCw357zztkFX/CRbxVZWNv1ImvR2i/6lEfSs7p7EdahWiGd0Yyk72MuRH1EldIgoeJzXjOy8QBNLTz1MuBMDz5IYo0jUGsw6fjV3d+D+1P76RZAicfJRgmAUnkMjE
Brad@Computer2
```

    On BitBucket: Settings > Access Keys > "Add Key". Made mine labeled gen4feb19


```
ssh -T BriteLight@bitbucket.org
The authenticity of host 'bitbucket.org (2406:da00:ff00::22c5:2ef4)' can't be established.
RSA key fingerprint is SHA256:zzXQOXSRBEiUtuE8AikJYKwbHaxvSc0ojez9YXaGp1A.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'bitbucket.org,2406:da00:ff00::22c5:2ef4' (RSA) to the list of known hosts.
authenticated via a deploy key.

You can use git or hg to connect to Bitbucket. Shell access is disabled.

This deploy key has read access to the following repositories:

BriteLight/fpga4fun: gen4feb19 –
```


==================
https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/2018-3.html

    <requires creating a Xlinx account>

     Activated Xlinx account

Hello Brad Leonard,

Thank you for creating a xilinx.com account! To activate your account, please follow the link below:
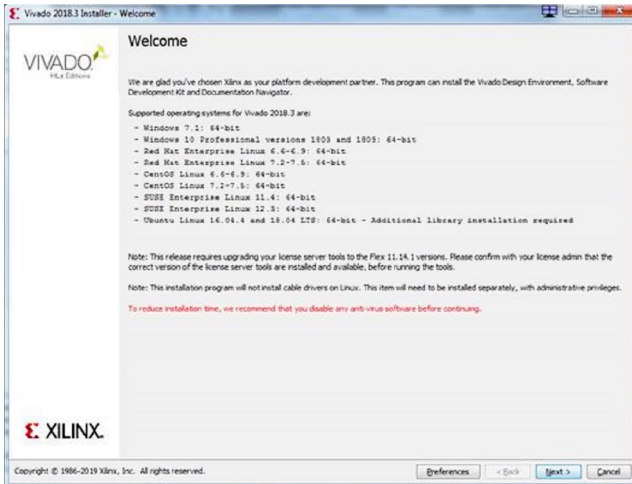
..yada yada..

Then this. Pick "Vivado HL WebPACK"

...keep going...
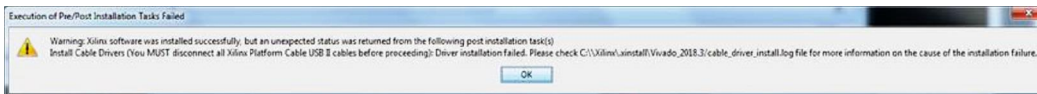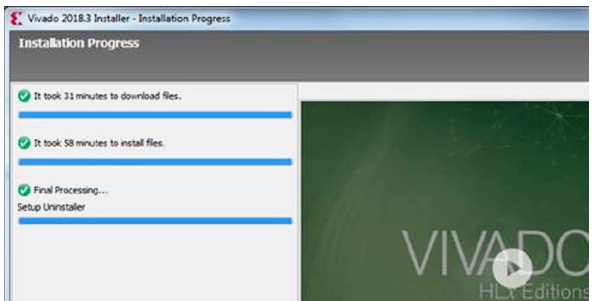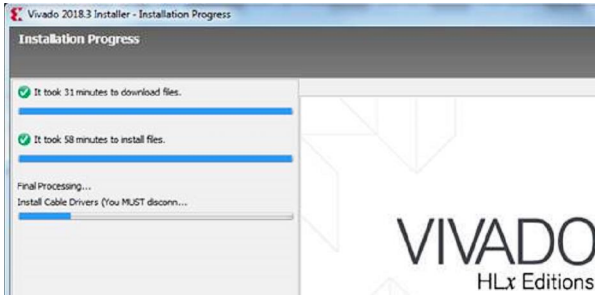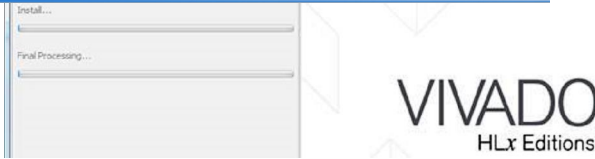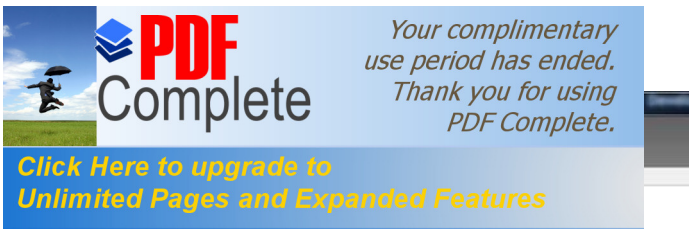
```
tail /cygdrive/c/Xilinx/.xinstall/Vivado_2018.3/cable_driver_install.log

install command=C:\Xilinx\Vivado\2018.3\data\xicom\cable_drivers\nt64\dlc10_win7\wdreg.exe -silent -inf C:\Xilinx\Vivado\2018.3
\data\xicom\cable_drivers\nt64\dlc10_win7\windrvr6.inf install.
Installer exit code = 1.
DriverInstaller->Dest Path = C:\Windows\system32\drivers\xpc4drvr.sys
DriverInstaller->Source Path = C:\Xilinx\Vivado\2018.3\data\xicom\cable_drivers\nt64\dlc10_win7\xpc4drvr.sys
File C:\Windows\system32\drivers\xpc4drvr.sys not found.
File version of C:\Xilinx\Vivado\2018.3\data\xicom\cable_drivers\nt64\dlc10_win7\xpc4drvr.sys is 1041.
DriverInstaller->XilinxPC4Driver First State = 4.
DriverInstaller->XilinxPC4Driver started.
Error occurred during driver installation.
ERROR: Failed to install Windows 7 pcusb drivers, exiting
```

b_acedemia\HowardULAB\fpga4fun

Project name: project_1

Project location: E:\CYGWIN64\cygwin64\home\Brad\tooling\example-samples\bb_dirs\b_acedemia\HowardULAB\fpga4fun

☑ Create project subdirectory

Project will be created at: E:/.../example-samples/bb_dirs/b_acedemia/HowardULAB/fpga4fun/project_1

New Project

Project Type

Specify the type of project to create.

● RTL Project
You will be able to add sources, create block designs in IP Integrator, generate IP, run RTL analysis, synthesis, implementation, design planning and analysis.
☐ Do not specify sources at this time

○ Post-synthesis Project You will be able to add sources, view device resources, run design analysis, planning and implementation.
☐ Do not specify sources at this time

○ I/O Planning Project
Do not specify design sources. You will be able to view part/package resources.

○ Imported Project
Create a Vivado project from a Synplify, XST or ISE Project File.

○ Example Project
Create a new Vivado project from a predefined template.

[?]   [< Back] [Next >] [Finish] [Cancel]

---

ust click through. Don 't add anything for "Add Sources".

New Project

Default Part

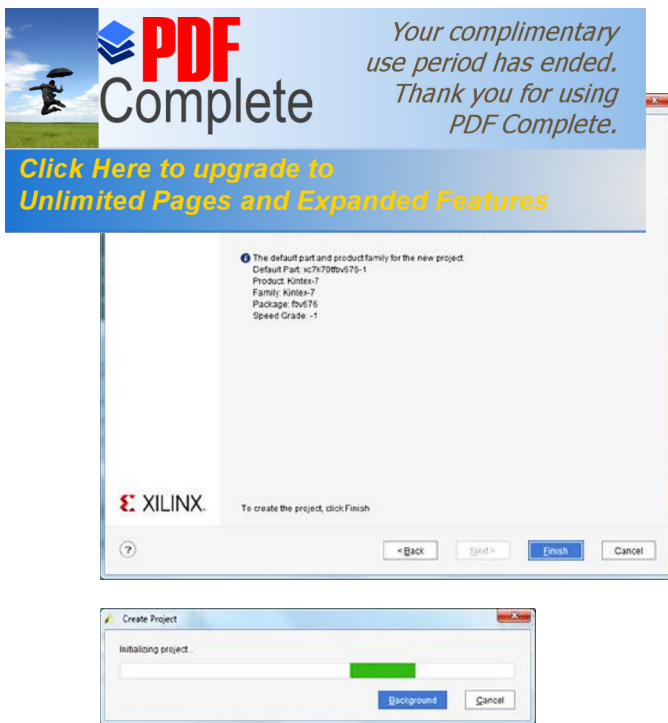Choose a default Xilinx part or board for your project.

Parts | Boards

Reset All Filters

Category: All   Package: All   Temperature: All

Family: All   Speed: All

Search: Q-

Part	I/O Pin Count	Available IOBs	LUT Elements	FlipFlops	Block RAMs	Ultra RAMs	DSPs
xc7k70tfbg676-1	676	300	41000	82000	135	0	240
xc7k70tfbv484-3	484	285	41000	82000	135	0	240
xc7k70tfbv484-2	484	285	41000	82000	135	0	240
xc7k70tfbv484-2L	484	285	41000	82000	135	0	240
xc7k70tfbv484-1	484	285	41000	82000	135	0	240
xc7k70tfbv676-3	676	300	41000	82000	135	0	240
xc7k70tfbv676-2	676	300	41000	82000	135	0	240
xc7k70tfbv676-2L	676	300	41000	82000	135	0	240
xc7k70tfbv676-1	676	300	41000	82000	135	0	240
xc7k70tfbg484-2L	484	285	41000	82000	135	0	240

[?]   [< Back] [Next >] [Finish] [Cancel]

ℹ The default part and product family for the new project:
Default Part: xc7k70tfbv676-1
Product: Kintex-7
Family: Kintex-7
Package: fbv676
Speed Grade: -1

XILINX   To create the project, click Finish

‹Back Next› **Finish** Cancel

Create Project

Initializing project...

Background Cancel

That's "Part 1"   Worth 0 points if you ask me...
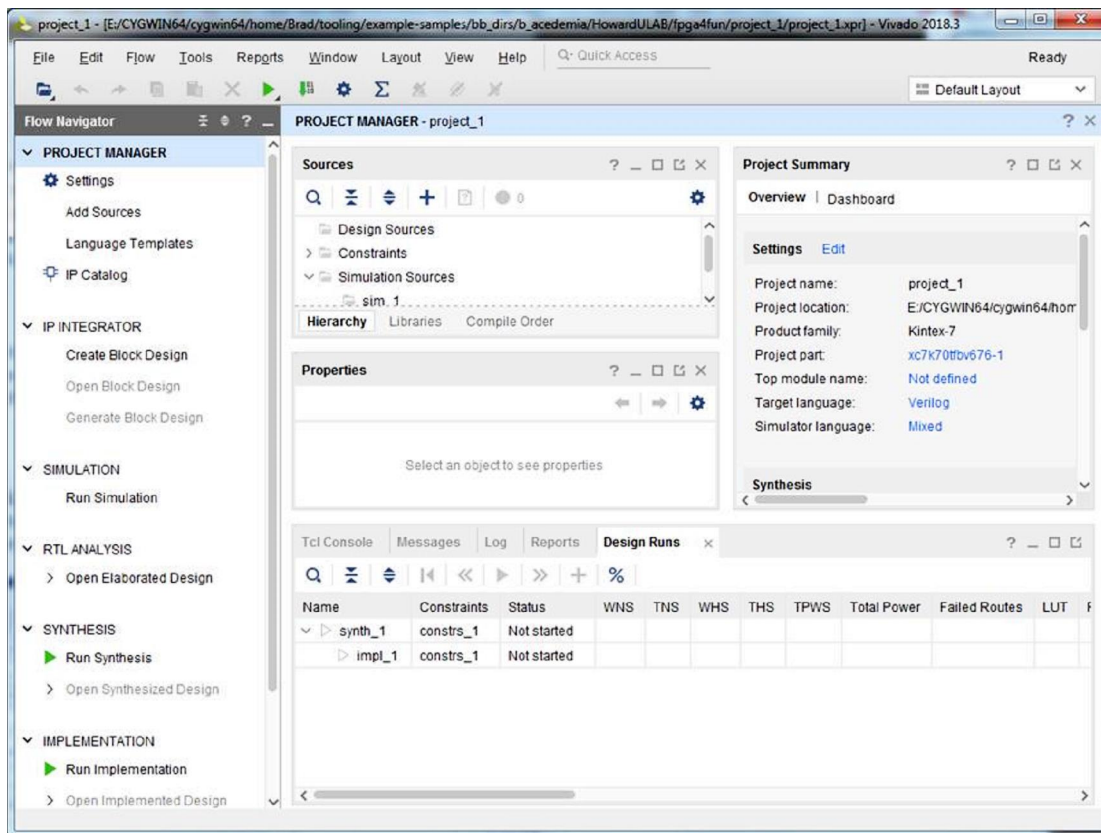
- dad

From: Brad [mailto:Brad@LeonardCA.com]
Sent: Monday, February 04, 2019 9:45 PM
To: anna Leonard
Subject: : nixLabAss1.pd

Hi Hannah,

Prereuisite for Proect 1 is uite interesting to say the least. Prep for all this must be made familiar to you as much as it is to me.
I haven't been drilling you on it, but the SSH subect matter has to be addressed. I 've done my deep thought and realie it 's a side subect.

From:
Sent:
To:
Subject:

From:
Sent:
To:
Subject:

```
apt-cyg searchall lynx
--2019-02-03 11:25:37--  http://cygwin.com/cgi-bin2/package-grep.cgi?text=1&arch=x86_64-cygwin&grep=lynx
Resolving cygwin.com (cygwin.com)... 209.132.180.131
Connecting to cygwin.com (cygwin.com)|209.132.180.131|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/plain]
Saving to: 'matches'

matches                           [ < =>                                              ]   1.56K  7.61KB/s    in 0.2s

2019-02-03 11:25:38 (7.61 KB/s) - 'matches' saved [1595]

fish
kdebase3
kstars
libKF5KIO5
libexo1-common
lynx
stellarium
vim-common
xorg-cf-files
zsh
[Brad@Computer2 ~]$
[Brad@Computer2 ~]$
[Brad@Computer2 ~]$ apt-cyg searchall git
--2019-02-03 11:27:20--  http://cygwin.com/cgi-bin2/package-grep.cgi?text=1&arch=x86_64-cygwin&grep=git
Resolving cygwin.com (cygwin.com)... 209.132.180.131
Connecting to cygwin.com (cygwin.com)|209.132.180.131|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [text/plain]
Saving to: 'matches'

matches                           [                     < =>                          ]  70.33K  13.0KB/s    in 5.7s

2019-02-03 11:27:27 (12.3 KB/s) - 'matches' saved [72015]
. . . . . . .
. . . .
. . .
.
git
gitg
gitk
gitweb

apt-cyg install git
```

```
lynx -source rawgit.com/transcode-open/apt-cyg/master/apt-cyg > apt-cyg
install apt-cyg /bin
```

```
mkdir Junior-Jolly-June/

git clone      https://github.com/junior-jolly-june/HowardULAB     Junior-Jolly-June
Cloning into 'Junior-Jolly-June'...
remote: Enumerating objects: 72, done.
remote: Counting objects: 100% (72/72), done.
remote: Compressing objects: 100% (57/57), done.
```

```
git clone
```

DESCRIPTION
   Clones a repository into a newly created directory, creates remote-tracking branches for each branch in the cloned repository (visible using git branch -r), and creates and checks out
      an initial branch that is forked from the cloned repository's currently active branch.

```
cd Junior-Jolly-June/
mkdir CS211
cd CS211/
```

```
lynx -crawl -dump https://api.census.gov/data/2017/acs/acsse\?get=K200001_001E,NAME\&for=place:\*\&in=state:$state\&key=10fcc06570607ec629a4c5dd6c1e71395f9916f1 | awk '{print $1}' | awk -F"\"\" '{print $4}' | grep -v NAME
```

```
Charleston
Huntington
Morgantown
Parkersburg
Weirton
Wheeling
```

```
foreach x ( `lynx -crawl -dump https://api.census.gov/data/2017/acs/acsse\?get=K200001_001E,NAME\&for=place:\*\&in=state:54\&key=10fcc06570607ec629a4c5dd6c1e71395f9916f1 | awk '{print $1}' | awk -F"\"\" '{print $4}' | grep -v NAME` )
    set county = `goo $x,"West Viginia" in county |grep wiki |grep County|awk -F"_" '{print $1}'|awk -F"/" '{print $5}'|head -1`
    echo ""
    echo ""
    echo "Looks like the city of $x is in $county County. But lets check and see."
    echo "...thinking.., hold on.."
    echo ""
    lynx -crawl -dump https://api.census.gov/data/2017/acs/acsse\?get=K200001_001E,NAME\&for=county:\*\&in=state:54\&key=10fcc06570607ec629a4c5dd6c1e71395f9916f1 |grep -w "$county County"
    if ( $status == 0 ) then
       echo "Does check out. $x City is in $county County"
    endif
    echo "============="
    end
```

```
Looks like the city of Charleston is in Kanawha County. But lets check and see.
...thinking.., hold on..

["2676","Kanawha County, West Virginia","54","039"],
Does check out. Charleston City is in Kanawha County
-------------

Looks like the city of Huntington is in Cabell County. But lets check and see.
...thinking.., hold on..

["1489","Cabell County, West Virginia","54","011"],
Does check out. Huntington City is in Cabell County
-------------

Looks like the city of Morgantown is in Monongalia County. But lets check and see.
...thinking.., hold on..

["1472","Monongalia County, West Virginia","54","061"],
Does check out. Morgantown City is in Monongalia County
-------------

Looks like the city of Parkersburg is in Wood County. But lets check and see.
...thinking.., hold on..

["1325","Wood County, West Virginia","54","107"],
Does check out. Parkersburg City is in Wood County
-------------

Looks like the city of Weirton is in  County. But lets check and see.
...thinking.., hold on..
```

```
mkdir lab1
cd lab1
mkdir  Alabama
mkdir "North Carolina"
mkdir "West Virginia"
```

```
vi Alabama/NE-AL  Alabama/SW-AL Alabama/Central-AL  "North Carolina"/SE-NC  "North Carolina"/West-NC  "North Carolina"/SW-NC  "West Virginia"/NW-VA
"West Virginia"/East-VA "West Virginia"/SW-VA

[hit these key sequences exactly as you see below]
    i   Bessemer<enter>    Birmingham<enter><esc>   :w :n
    i   Huntsville<enter>  Madison<enter><esc>      :w :n
    i    Auburn<enter>     Opelika<enter><esc>      :w :n

    i   Charlotte<enter>  Salisbury<enter><esc>    :w :n
    i   High Point<enter> Mint Hill<enter><esc>    :w :n
    i    Raleigh<enter>    Wake Forest<enter><esc> :w :n

    i   Charleston<enter> Huntington<enter><esc>   :w :n
    i   Morgantown<enter> Parkersburg<enter><esc> :w :n
    i   Weirton<enter>    Wheeling<enter><esc>     :wq
--
[or, try this at the CLI avoiding vi altogether(copy-n-paste)]
    echo Bessemer      >   Alabama/NE-AL
    echo Birmingham    >>  Alabama/NE-AL
    echo Huntsville    >   Alabama/SW-AL
    echo Madison       >>  Alabama/SW-AL
    echo Auburn        >   Alabama/Central-AL
    echo Opelika       >>  Alabama/Central-AL

    echo Charlotte     >   "North Carolina"/SE-NC
    echo Salisbury     >>  "North Carolina"/SE-NC
    echo "High Point"  >   "North Carolina"/West-NC
    echo "Mint Hill"   >>  "North Carolina"/West-NC
    echo Raleigh       >   "North Carolina"/SW-NC
    echo "Wake Forest" >>  "North Carolina"/SW-NC

    echo Charleston    >   "West Virginia"/NW-VA
    echo Huntington    >>  "West Virginia"/NW-VA
    echo Morgantown    >   "West Virginia"/East-VA
    echo Parkersburg   >   "West Virginia"/East-VA
    echo Weirton       >>  "West Virginia"/SW-VA
    echo Wheeling      >   "West Virginia"/SW-VA
```

```
ls *

Alabama:
Central-AL  NE-AL  SW-AL

'North Carolina':
SE-NC  SW-NC  West-NC

'West Virginia':
East-VA  NW-VA  SW-VA
```

```
mkdir Alabama/Jefferson-County
mkdir Alabama/Madison-County
mkdir Alabama/Lee-County

mkdir "North Carolina"/Mecklenburg-County
mkdir "North Carolina"/Gaston-County
mkdir "North Carolina"/Wake-County

mkdir "West Virginia"/Kanawha-County
mkdir "West Virginia"/Wood-County
mkdir "West Virginia"/Monongalia-County
--
mv Alabama/NE-AL        Alabama/Jefferson-County/
mv Alabama/SW-AL        Alabama/Madison-County/
mv Alabama/Central-AL Alabama/Lee-County/

mv "North Carolina"/SE-NC    "North Carolina"/Mecklenburg-County/
mv "North Carolina"/West-NC  "North Carolina"/Gaston-County/
mv "North Carolina"/SW-NC    "North Carolina"/Wake-County/

mv "West Virginia"/NW-VA   "West Virginia"/Kanawha-County/
mv "West Virginia"/East-VA "West Virginia"/Wood-County/
mv "West Virginia"/SW-VA   "West Virginia"/Ohio-County/
```

```
Alabama/Lee-County:
Central-AL

Alabama/Madison-County:
SW-AL

'North Carolina/Gaston-County':
West-NC

'North Carolina/Mecklenburg-County':
SE-NC

'North Carolina/Wake-County':
SW-NC

'West Virginia/Kanawha-County':
NW-VA

'West Virginia/Ohio-County':
SW-VA

'West Virginia/Wood-County':
East-VA
```

```
ls -aR

.:
.   ..   Alabama  'North Carolina'  'West Virginia'

./Alabama:
.  ..  Jefferson-County  Lee-County  Madison-County

./Alabama/Jefferson-County:
.  ..  NE-AL

./Alabama/Lee-County:
.  ..  Central-AL

./Alabama/Madison-County:
.  ..  SW-AL

'./North Carolina':
.  ..  Gaston-County  Mecklenburg-County  Wake-County

'./North Carolina/Gaston-County':
.  ..  West-NC

'./North Carolina/Mecklenburg-County':
.  ..  SE-NC

'./North Carolina/Wake-County':
.  ..  SW-NC

'./West Virginia':
.  ..  Kanawha-County  Ohio-County  Wood-County

'./West Virginia/Kanawha-County':
.  ..  NW-VA

'./West Virginia/Ohio-County':
.  ..  SW-VA

'./West Virginia/Wood-County':
.  ..  East-VA
```

```
ls -lL */*/*

-rw-r--r-- 1 Brad None 20 Feb  3 22:21  Alabama/Jefferson-County/NE-AL
-rw-r--r-- 1 Brad None 15 Feb  3 22:21  Alabama/Lee-County/Central-AL
-rw-r--r-- 1 Brad None 19 Feb  3 22:21  Alabama/Madison-County/SW-AL
-rw-r--r-- 1 Brad None 33 Feb  3 22:21 'North Carolina/Gaston-County/West-NC'
-rw-r--r-- 1 Brad None 20 Feb  3 22:21 'North Carolina/Mecklenburg-County/SE-NC'
-rw-r--r-- 1 Brad None 26 Feb  3 22:21 'North Carolina/Wake-County/SW-NC'
-rw-r--r-- 1 Brad None 22 Feb  3 22:21 'West Virginia/Kanawha-County/NW-VA'
-rw-r--r-- 1 Brad None  9 Feb  3 22:21 'West Virginia/Ohio-County/SW-VA'
-rw-r--r-- 1 Brad None 12 Feb  3 22:21 'West Virginia/Wood-County/East-VA'
```

```
mv Alabama/Madison-County/ Alabama/Cities
--
mv Alabama/Jefferson-County/NE-AL Alabama/Cities/
mv Alabama/Lee-County/Central-AL Alabama/Cities/
--
rmdir Alabama/Jefferson-County/
rmdir Alabama/Lee-County/
--
chmod 444 Alabama/Cities/*
--
```

```
drwxr-xr-x 1 User1 None 0 Feb  3 20:22  Alabama
drwxr-xr-x 1 User1 None 0 Feb  3 20:22 'North Carolina'
drwxr-xr-x 1 User1 None 0 Feb  3 20:22 'West Virginia'

../lab1/Alabama:
total 0
drwxr-xr-x 1 User1 None 0 Feb  3 22:35 Cities

../lab1/Alabama/Cities:
total 48
-r--r--r-- 1 User1 None 15 Feb  3 22:21 Central-AL
-r--r--r-- 1 User1 None 20 Feb  3 22:21 NE-AL
-r--r--r-- 1 User1 None 19 Feb  3 22:21 SW-AL

'../lab1/North Carolina':
total 0
drwxr-xr-x 1 User1 None 0 Feb  3 22:35 Gaston-County
drwxr-xr-x 1 User1 None 0 Feb  3 22:47 Mecklenburg-County
drwxr-xr-x 1 User1 None 0 Feb  3 22:35 Wake-County

'../lab1/North Carolina/Gaston-County':
total 16
-rw-r--r-- 1 User1 None 33 Feb  3 22:21 West-NC

'../lab1/North Carolina/Mecklenburg-County':
total 16
-rw-r--r-- 1 User1 None 20 Feb  3 22:21 SE-NC

'../lab1/North Carolina/Wake-County':
total 16
-rw-r--r-- 1 User1 None 26 Feb  3 22:21 SW-NC

'../lab1/West Virginia':
total 0
drwxr-xr-x 1 User1 None 0 Feb  3 22:35 Kanawha-County
drwxr-xr-x 1 User1 None 0 Feb  3 22:35 Ohio-County
drwxr-xr-x 1 User1 None 0 Feb  3 22:36 Wood-County

'../lab1/West Virginia/Kanawha-County':
total 16
-rw-r--r-- 1 User1 None 22 Feb  3 22:21 NW-VA

'../lab1/West Virginia/Ohio-County':
total 16
-rw-r--r-- 1 User1 None 9 Feb  3 22:21 SW-VA

'../lab1/West Virginia/Wood-County':
total 16
-rw-r--r-- 1 User1 None 12 Feb  3 22:21 East-VA
```