lab 5

Q1

Q2

Q3 Challenge Question

Screenshot 1 (top)

Applications   Oct 30 11:00 AM

${student}: rap@cis106: /homerap@cis106: /home

1: rap@cis106: /home ∨

```
rap@cis106:~$ wget https://cis106.com/assets/scripts/marstenhouse.sh
--2025-10-30 09:49:08--  https://cis106.com/assets/scripts/marstenhouse.sh
Resolving cis106.com (cis106.com)... 185.199.108.153
Connecting to cis106.com (cis106.com)|185.199.108.153|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3407 (3.3K) [application/x-sh]
Saving to: 'marstenhouse.sh'

marstenhouse 100%   3.33K  --.-KB/s    in 0.003s

2025-10-30 09:49:08 (1.01 MB/s) - 'marstenhouse.sh' saved [3407/3407]

rap@cis106:~$ bash marstenhouse.sh
```

```
Everything in Salem's Lot is connected to that house.
You can see it from every part of the town.
It's like a beacon throwing off an energy force.
```

Scenario:

```
    You have been kidnapped by Barlow's minions and brought to Marsten House.
    You wake up disoriented and surrounded by darkness.
    Your only light comes from your smartphone - the pwd and ls commands.
    Somewhere within this house are 5 hidden keys.
    Each one contains a piece of the code you need to escape.
    Once you find a key, reveal its true location using realpath.
    Only then will you know where you truly are.
```

Challenge:

```
    1. Explore Marsten House and locate all 5 hidden keys.
    2. You may only use relative paths when navigating with cd.
    3. You must use absolute paths only when revealing each key's location with realpath.
    4. Commands allowed: ls, pwd, cd, tree, and realpath.
```

2: rap@cis106: ~/marstenHouse ∨

```
rap@cis106:~/marstenHouse/baseme
nt/master_bedroom/basement$ real
path .key1
rap@cis106:~/marstenHouse/baseme
nt/masterrap@cis106:~/marstenHous
e/basement/master_bedroom/baseme
nt$ cd ../../..
rap@cis106:~/marstenHouse$ ls
basement
rap@cis106:~/marstenHouse$ realp
ath .key3
/home/rap/marstenHouse/.key3
rap@cis106:~/marstenHouse$ realp
ath .key4
/home/rap/marstenHouse/.key4
rap@cis106:~/marstenHouse$ 
```

3: rap@cis106: /home ∨

```
rap@cis106:~/marstenHouse/baseme
nt$ ls
master_bedroom
rap@cis106:~/marstenHouse/baseme
nt$ realpath .key1
/home/rap/marstenHouse/basement/
.key1
rap@cis106:~/marstenHouse/baseme
nt$ cd ../../..
rap@cis106:/home$ ls
rap
rap@cis106:/home$ realpath .key3
/home/.key3
rap@cis106:/home$ realpath .key4
/home/.key4
rap@cis106:/home$ 
```

Screenshot 2 (bottom)

Applications   Oct 30 11:00 AM

${student}: rap@cis106: /homerap@cis106: /home

1: rap@cis106: /home ∨

```
Documents        lab5files.zip.1   student
Downloads        marstenHouse      Templates
essentials.sh    marstenhouse.sh   Videos
essentials.sh.1  Music             vscode.sh
essentials.sh.2  Pictures
la4.script3.sh   Public
rap@cis106:~$ cd marstenhouse
bash: cd: marstenhouse: No such file or directory
rap@cis106:~$ cd ~
rap@cis106:~$ pwd
/home/rap
rap@cis106:~$ wget https://cis106.com/assets/scripts/marstenhouse.sh
--2025-10-30 09:58:49--  https://cis106.com/assets/scripts/marstenhouse.sh
Resolving cis106.com (cis106.com)... 185.199.108.153
Connecting to cis106.com (cis106.com)|185.199.108.153|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3407 (3.3K) [application/x-sh]
Saving to: 'marstenhouse.sh.1'

marstenhouse 100%   3.33K  --.-KB/s    in 0s

2025-10-30 09:58:49 (6.65 MB/s) - 'marstenhouse.sh.1' saved [3407/3407]

rap@cis106:~$ chmod +x martenhouse.sh.1
chmod: cannot access 'martenhouse.sh.1': No such file or directory
rap@cis106:~$ marstenhouse.sh.1
bash: marstenhouse.sh.1: command not found
rap@cis106:~$ chmod +x marstenhouse.sh.1
rap@cis106:~$ bash marstenhouse.sh.1
```

```
Everything in Salem's Lot is connected to that house.
You can see it from every part of the town.
It's like a beacon throwing off an energy force.
```

2: rap@cis106: ~/marstenHouse ∨

```
rap@cis106:~/marstenHouse/baseme
nt/master_bedroom/basement$ real
path .key1
rap@cis106:~/marstenHouse/baseme
nt/masterrap@cis106:~/marstenHous
e/basement/master_bedroom/baseme
nt$ cd ../../..
rap@cis106:~/marstenHouse$ ls
basement
rap@cis106:~/marstenHouse$ realp
ath .key3
/home/rap/marstenHouse/.key3
rap@cis106:~/marstenHouse$ realp
ath .key4
/home/rap/marstenHouse/.key4
rap@cis106:~/marstenHouse$ 
```

3: rap@cis106: /home ∨

```
rap@cis106:~/marstenHouse/baseme
nt$ ls
master_bedroom
rap@cis106:~/marstenHouse/baseme
nt$ realpath .key1
/home/rap/marstenHouse/basement/
.key1
rap@cis106:~/marstenHouse/baseme
nt$ cd ../../..
rap@cis106:/home$ ls
rap
rap@cis106:/home$ realpath .key3
/home/.key3
rap@cis106:/home$ realpath .key4
/home/.key4
rap@cis106:/home$ 
```

```
2: rap@cis106: ~/marstenHouse  ∨
rap@cis106:~$ cd marstenHouse
rap@cis106:~/marstenHouse$ pwd
/home/rap/marstenHouse
rap@cis106:~/marstenHouse$ tree -a
.
├── basement
│   ├── .key2
│   └── master_bedroom
│       ├── basement
│       │   └── .key1
│       ├── .key5
│       └── master_bedroom
├── .key3
└── .key4

5 directories, 5 files
rap@cis106:~/marstenHouse$ ls
basement
rap@cis106:~/marstenHouse$ cd basement
rap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key1
/home/rap/marstenHouse/basement/.key1
rap@cis106:~/marstenHouse/basement$ tree -a
.
├── .key2
└── master_bedroom
    ├── basement
    │   └── .key1
    ├── .key5
    └── master_bedroom
```

```
${student}: rap@cis106: ~/marstenHouserap@cis106: ~/marstenHouse          🔍 ☰  _  ▫  ×
2: rap@cis106: ~/marstenHouse  ∨                                                    ▫
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key1
/home/rap/marstenHouse/basement/.key1
rap@cis106:~/marstenHouse/basement$ tree -a
.
├── .key2
└── master_bedroom
    ├── basement
    │   └── .key1
    ├── .key5
    └── master_bedroom

4 directories, 3 files
rap@cis106:~/marstenHouserap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key2/home/rap/marstenHouse/basement/.key2
rap@cis106:~/marstenHouse/basement$ cd master_bedrorrap@cis106:~/marstenHouse/barap@cis106:~/marstenHouse/basement/master_bedroom$ ls
basement  master_bedroom
rap@cis106:~/marstenHouse/basement/master_bedroom$ realpath .key5
/home/rap/marstenHouse/basement/master_bedroom/.key5
rap@cis106:~/marstenHouse/basement/master_bedroom$ cd basement
rap@cis106:~/marstenHouse/basement/master_bedroom/basement$ ls
rap@cis106:~/marstenHouse/basement/master_bedroom/basement$ realpath .key1
rap@cis106:~/marstenHouse/basement/masterrap@cis106:~/marstenHouse/basement/master_bedroom/basement$ cd ../../..
rap@cis106:~/marstenHouse$ ls
basement
rap@cis106:~/marstenHouse$ realpath .key3
/home/rap/marstenHouse/.key3
rap@cis106:~/marstenHouse$ realpath .key4
/home/rap/marstenHouse/.key4
rap@cis106:~/marstenHouse$ ▮
```

```
3: rap@cis106: /home ⌄
rap@cis106:~$ cd ~/marstenHouse
rap@cis106:~/marstenHouse$ pwd
/home/rap/marstenHouse
rap@cis106:~/marstenHouse$ cd basement
rap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key2
/home/rap/marstenHouse/basement/.key2
rap@cis106:~/marstenHouse/basement$ cd master_bedrom
bash: cd: master_bedrom: No such file or directory
rap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key5
/home/rap/marstenHouse/basement/.key5
rap@cis106:~/marstenHouse/basement$ cd basement
bash: cd: basement: No such file or directory
rap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key1
/home/rap/marstenHouse/basement/.key1
rap@cis106:~/marstenHouse/basement$ cd ../../..
rap@cis106:/home$ ls
rap
rap@cis106:/home$ realpath .key3
/home/.key3
rap@cis106:/home$ realpath .key4
/home/.key4
rap@cis106:/home$ █
```

```
3: rap@cis106: ~ ⌄
rap@cis106:~$ echo "marstenHouse
> ├── .key3          [KEY 3]
> ├── .key4          [KEY 4]
> └── basement
>     ├── .key2      [KEY 2]
>     └── master_bedroom
>         ├── .key5 [KEY 5]
>         └── basement
>             └── .key1 [KEY 1]"█
```

Applications   Oct 30 10:52 AM   20% 57% 38% 0.0 kB 0.0 kB

${student}: rap@cis106: ~/marstenHouse/basement/master_bedroom/basementrap@cis106: ~/marstenHouse/basement/master_bedroom/basement

1: rap@cis106: /home   2: rap@cis106: ~/marstenHouse/basement/master_bedroom/basement

```
bash: cd: marstenhouse: No such file or direc
tory
rap@cis106:~$ cd ~
rap@cis106:~$ pwd
/home/rap
rap@cis106:~$ wget https://cis106.com/assets/
scripts/marstenhouse.sh
--2025-10-30 09:58:49--  https://cis106.com/a
ssets/scripts/marstenhouse.sh
Resolving cis106.com (cis106.com)... 185.199.
108.153
Connecting to cis106.com (cis106.com)|185.199
.108.153|:443... connected.
HTTP request sent, awaiting response... 200 O
K
Length: 3407 (3.3K) [application/x-sh]
Saving to: 'marstenhouse.sh.1'

marstenhouse 100%   3.33K  --.-KB/s    in 0s

2025-10-30 09:58:49 (6.65 MB/s) - 'marstenhou
se.sh.1' saved [3407/3407]

rap@cis106:~$ chmod +x martenhouse.sh.1
chmod: cannot access 'martenhouse.sh.1': No s
uch file or directory
rap@cis106:~$ marstenhouse.sh.1
bash: marstenhouse.sh.1: command not found
rap@cis106:~$ chmod +x marstenhouse.sh.1
rap@cis106:~$ bash marstenhouse.sh.1

|Everything in Salem's Lot is connected to th
at house.|
|You can see it from every part of the town.
```

```
        └── master_bedroom
    ├── .key3
    └── .key4

5 directories, 5 files
rap@cis106:~/marstenHouse$ ls
basement
rap@cis106:~/marstenHouse$ cd basement
rap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key1
/home/rap/marstenHouse/basement/.key1
rap@cis106:~/marstenHouse/basement$ tree -a
.
├── .key2
├── master_bedroom
│   ├── basement
│   │   └── .key1
│   ├── .key5
│   └── master_bedroom

4 directories, 3 files
rap@cis106:~/marstenHouserap@cis106:~/marstenHouse/basement$ ls
master_bedroom
rap@cis106:~/marstenHouse/basement$ realpath .key2/home/rap/marstenHouse/basement/.key2
rap@cis106:~/marstenHouse/basement$ cd master_bedrorrap@cis106:~/marstenHouse/barap@cis106:~/marstenHouse/basement/master_bedroo
m$ ls
basement  master_bedroom
rap@cis106:~/marstenHouse/basement/master_bedroom$ realpath .key5
/home/rap/marstenHouse/basement/master_bedroom/.key5
rap@cis106:~/marstenHouse/basement/master_bedroom$ cd basement
rap@cis106:~/marstenHouse/basement/master_bedroom/basement$ ls
rap@cis106:~/marstenHouse/basement/master_bedroom/basement$ realpath .key1
rap@cis106:~/marstenHouse/basement/master_bedroom/basement$ cd ../
```