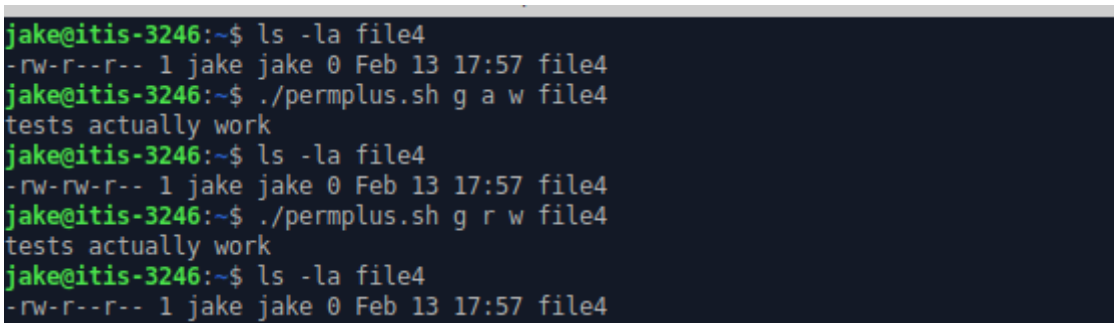
Scripting 3: Writing Your Own Scripts

Enhanced addpermplus.sh

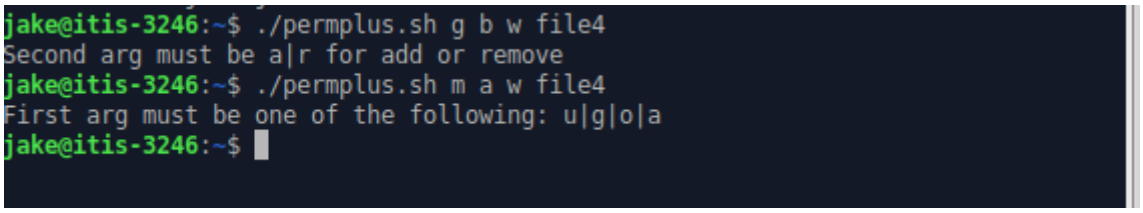
1. Include a screenshot of the script running correctly

Your screenshot:



2. Include a screenshot of the script running in an error condition

Your screenshot:



3. Include your code for the script. Please ensure that the code you paste here uses a monospaced font and is white.

```
#!/bin/bash
#author Jake Treese <jtreese@uncc.edu>
#this is a script to add or remove permisions to files
#this takes in 4 arguements like this:
#./permplus <arg1> <arg2> <arg3> <filename>

if [[ $# -ne 4 ]]; then
                echo "Need 4 parameters.
                Ex: $0  <u|g|o|a> <a|r> <r|w|x> <filename>"
                exit 1
fi

#test to check if the parameters fall in line
```

```
if [[ $1 != 'u' && $1 !=  'g' && $1 !=  'o' && $1 !=  'a' ]]; then
        echo "First arg must be one of the following: u|g|o|a"
        exit 1
fi

#test to see if second param falls in line
if [[ $2 != 'a' && $2 != 'r' ]]; then
        echo "Second arg must be a|r for add or remove"
        exit 1
fi

#test to see if 3rd param falls in line
if [[ $3 != 'r' && $3 != 'w' && $3 != 'x' ]]; then
        echo "Third arg must be r|w|x for read, write or execute"
        exit 1
fi
if [[ ! -f "$4" ]]; then
        echo "File $4 not found"
        exit 1
fi

echo "tests actually work"

if [[ $2 == 'r' ]]; then
        command="chmod $1-$3 $4"
elif [[ $2 == 'a' ]]; then
        command="chmod $1+$3 $4"
fi

$command

ls -la $4
```

Writing a function

4. Include a screenshot of the script running correctly

Your screenshot:

```
jake@itis-3246:~$ lxc delete badtest
jake@itis-3246:~$ ./ipcont.sh
Testing the function create_container
Creating test
jake@itis-3246:~$ lxc list
+----------------+---------+----------------------+------+-----------+-------
--+
|      NAME      |  STATE  |         IPV4         | IPV6 |   TYPE    | SNAPSH
S |
+----------------+---------+----------------------+------+-----------+-------
--+
| alive-bluebird | STOPPED |                      |      | CONTAINER | 0
  |
+----------------+---------+----------------------+------+-----------+-------
--+
| c1             | RUNNING | 172.16.31.253 (eth0) |      | CONTAINER | 0
  |
+----------------+---------+----------------------+------+-----------+-------
--+
| test           | STOPPED |                      |      | CONTAINER | 0
  |
+----------------+---------+----------------------+------+-----------+-------
--+
jake@itis-3246:~$
```

5. Include a screenshot of the script running in an error condition

Your screenshot:

```
jake@itis-3246:~$ ./ipcont.sh
Testing the function create_container
Incorrect IP address or formatting
Try again with numbers in this format |000.000.000.000|
jake@itis-3246:~$ vi ipcont.sh
jake@itis-3246:~$
```

6. Include your code for the script. Please ensure that the code you paste here uses a monospaced font and is white.

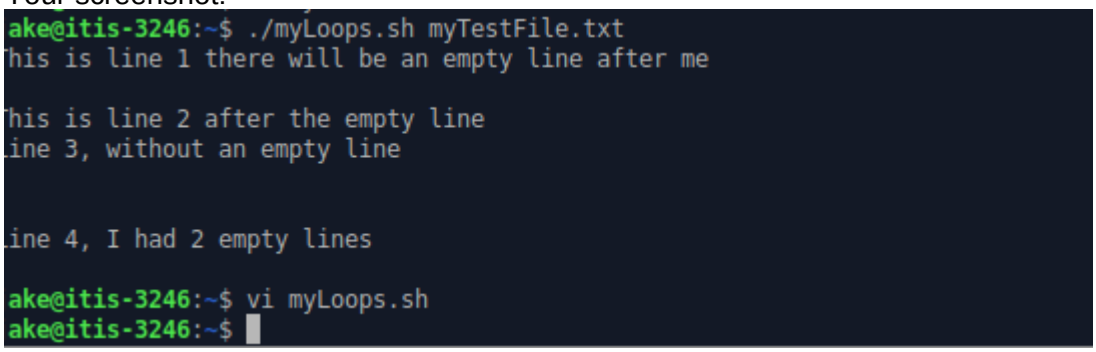
```
#!/bin/bash
#author jake Treese <jtreese@uncc.edu>
#script to make a container and designate its ip
# takes 2 args: ./ipcont <container name> <container ip>

create_container() {
  if [[ $2 =~ ^[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}$ ]]; then

          lxc init ubuntu:18.04 $1
          lxc network attach lxdbr0 $1 eth0
          lxc config device set $1 eth0 ipv4.address $2
  else
```

```
        echo "Incorrect IP address or formatting"
        echo "Try again with numbers in this format |000.000.000.000|"
 fi
 }

echo "Testing the function create_container"
#create_container test adfasasdfasdf

create_container test 172.16.31.254
```

Writing a for loop

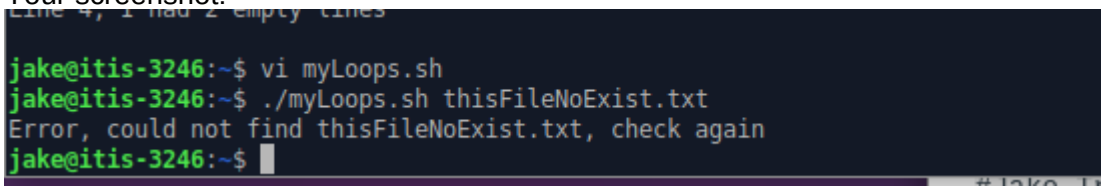
7. Include a screenshot of the script running correctly

Your screenshot:



8. Include a screenshot of the script running in an error condition

Your screenshot:



9. Include your code for the script. Please ensure that the code you paste here uses a monospaced font and is white.

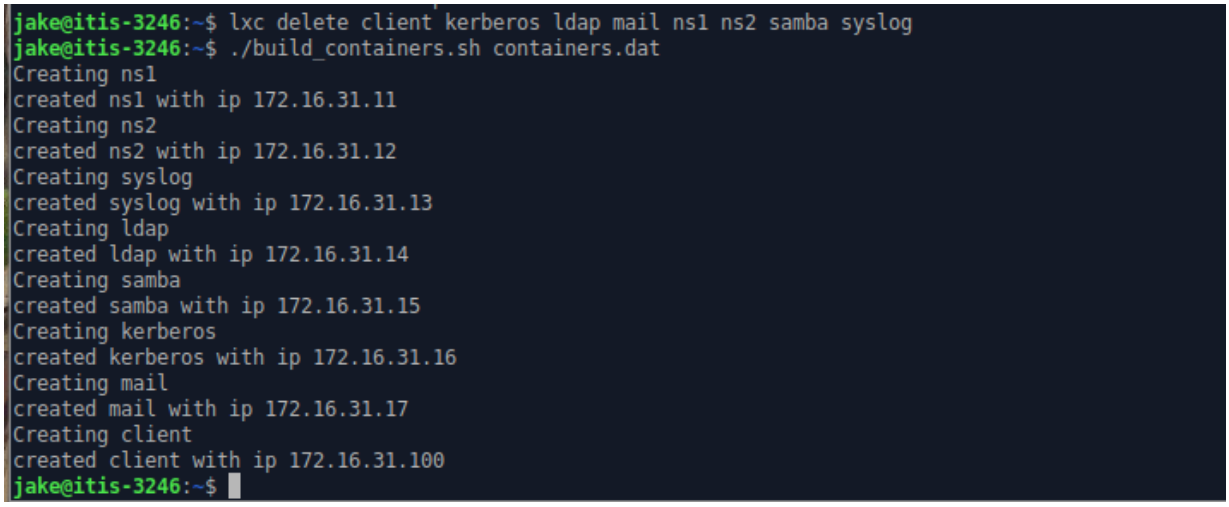
```
#!/bin/bash
#Jake Treese <jtreese@uncc.edu>
#Loop through and read a file
#ignores whitespace and extra lines
```

```
if [ -f "$1" ]; then
      while IFS= read -r line; do
                  echo "$line"
                  done < "$1"
      else
                  echo "Error, could not find $1, check again"
fi
```

Combining functions and for loops

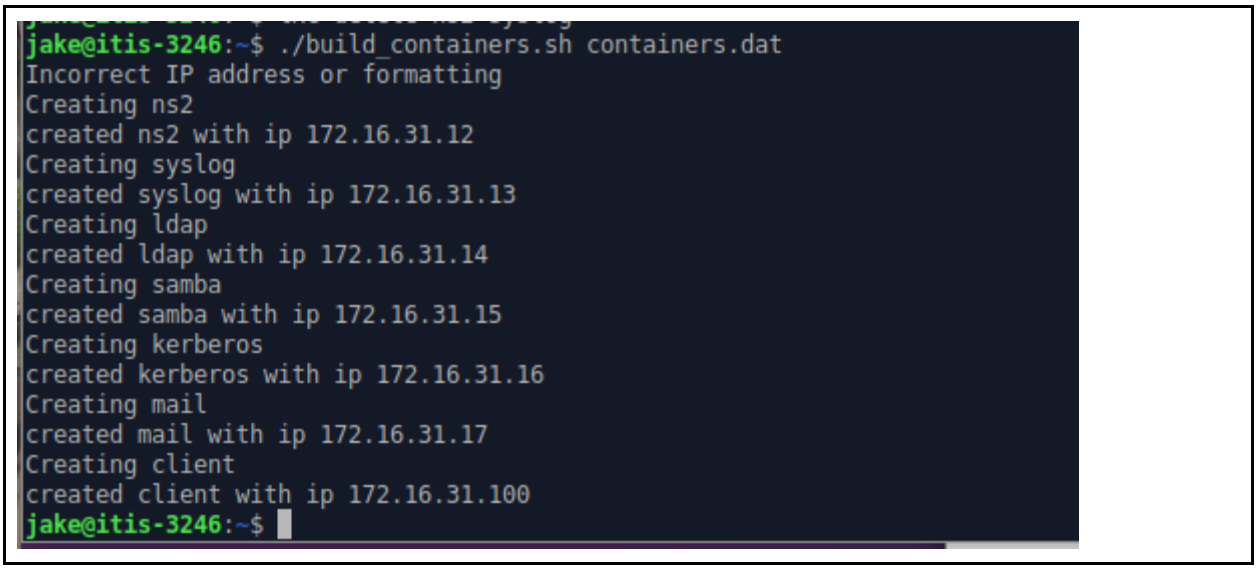
10. Include a screenshot of the script running correctly

Your screenshot:



11. Include a screenshot of the script running in an error condition

Your screenshot:



12. Include your code for the script. Please ensure that the code you paste here uses a monospaced font and is white.

```
create_container() {

      if [[ $2 =~ ^[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}$ ]];
then

                  lxc init ubuntu:18.04 $1 </dev/null
                  lxc network attach lxdbr0 $1 eth0 </dev/null
                  lxc config device set $1 eth0 ipv4.address $2
                  echo "created $1 with ip $2"
      else
                  echo "Incorrect IP address or formatting"
      fi

  }



if [ -f "$1" ]; then
      while IFS= read -r line; do
                  create_container $line
                  done < "$1"
            else
                  echo "Error, could not find $1, check again"
                  exit 1
```