

Linux Classroom Series – 03/Sept/2020

Iterating through directories and files

- To do this we can write a very simple *for* loop
- Exercise: Find mistake in the following shell script

```
#!/bin/bash
echo "Directory path entered by user is
/home/ubuntu/contents/*"
for path in "/home/ubuntu/contents/*";
do
    echo "processing ${path} "
    if [ -d "$path" ];
    then
        echo "${path} is directory"
    elif [ -f "$path" ];
    then
        echo "$path is file"
    fi
done
```

- where as this script is working

```
for file in /home/ubuntu/contents/*; do
    echo $file
done
```

- Try to find a way to reuse last commands output
- Nesting loops

```
#!/bin/bash
for (( row=1; row<=3; row++ ))
do

    for (( col=1; col<=3; col++ ))
    do
        echo "${row} * ${col}"
    done
done
```

- Redirecting loop output to a file

```
#!/bin/bash
for (( row=1; row<=3; row++ ))
do

    for (( col=1; col<=3; col++ ))
    do
        echo "${row} * ${col}"
    done >> rowscols.txt
done
```

While and until

- Example of while

```
$COUNT=20
while [ $COUNT -gt 0 ] ;
do
    echo "$COUNT"
    (( COUNT-- ))
done;
```

- Another example for same logic

```
#!/bin/bash
COUNT=20
while [ "$COUNT" -gt 0 ] ;
do
    echo "$COUNT"
    (( COUNT-- ))

done;
```

- Example Until loop

```
#!/bin/bash
COUNT=10
until (( COUNT < 0 )); do
    echo "$COUNT"
    (( COUNT-- ))
done
```