

BASH SCRIPTING

RECAPPING LAST CLASS

- When/Why to use
- Creating and running
- Poundbang/shebang
- Comments #
- Arguments `$ { n } , $0`

ARGUMENTS (CONT.)

- `$#` -> total number of arguments
- `$@` -> array of arguments
- `$*` -> string with arguments separated by space

VARIABLES

- Assignment:
 - `mynum=5`
 - `mycolor=hello`
 - `mylongmsg='hello world'`
- Reading/Accessing Value: precede by \$
 - `echo $mynum`
- Spacing is important

SINGLE VS DOUBLE QUOTES

- Single quotes -> everything treated literally
- Double quotes -> expand variables inside

ARITHMETIC EXPANSION

- Can't just do $1+1$ or $\text{var1}+\text{var2}$
- `$ ((1+1))`
- `$ ((num1+num2))`
- Operators available:
`+, -, *, /, %, ++, --, **`

CONDITIONALS

```
if condition; then
    commands
elif condition; then
    commands
else
    commands
fi
```

EXPRESSING CONDITIONS

- `[$var1 == $var2]`
- This will do string comparison
- For numerical comparison use `-eq`, `-le`, `-ge`, `-lt`, `-gt`
- To combine, both are in brackets and combine with `&&`
- Can also do arithmetic for condition:
`((mynum1<mynum2))`

LOOPS

```
for val in list  
do  
    commands  
done
```

- Example lists:
 - 0 1 2 3 4
 - word1 word2 word3
 - {start..stop..step}

LOOPS CONT.

- Can leave out `in list` part -> loops through arguments
- While loops:

```
while condition;  
do  
    commands  
done
```