

CS 35L Fall 17 Section 7 Notes 3  
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More Bash:

1. Conditions:

-e file # file exists  
-f file # regular file exists  
-d file # directory exists

2. Bash function:

```
function function_name {  
    commands  
}
```

```
function () {  
    commands  
}
```

3. Pass arguments to functions:

```
func argument1 argument2
```

Get the arguments inside the function: \$0, \$1, \$2 ...

Same as passing parameters from command lines

4. Get return value from the function

return keyword

Get return value: \$?

5. Integer list: {start..end}

e.g. for i in {1..10}

6. Multiple condition together

! [condition1]

[ condition1 ] && [ condition2]

[ condition1 ] || [ condition2]

7. The length of the string

\${#string}

```
#!/bin/bash
for i in `echo $PATH | tr : ' '`
do
  for j in `ls $i`
  do
    len=${#j}
    if [ $len -eq 1 ] && [ -f "$i/$j" ]
    then
      echo "$i/$j"
    fi
  done
done
```

```
#!/bin/bash
function square {
  return $(( $1 * $1 ))
}
multiply() {
  return $(( $1 * $2 ))
}
for i in {1..15}
do
  square $i
  sq=$?
  multiply $i $(( $i + 1 ))
  echo "$sq, $?"
done
```