Bash Scripting Tutorial for Beginners:

—> bash files end with .sh

—> #!/bin/bash (defines the current interpreter)
=> always at the beginning of a new bash-file

—> echo hello (puts out text in the terminal)

—> set variables
- MY_LOCATION_FROM = /my/location/from
- MY_LOCATION_TO = /my/location/to

cp $MY_LOCATION_FROM $MY_LOCATION_TO

- always use Uppercase with a $
- NAME = Herbert
- echo $NAME

—> read (uses the input in the terminal for the script)
- echo what is your first name?
- read FIRST_NAME
- echo Hello $FIRST_NAME

—> | (ability to connect commands)
- ls -l /usr/bin | grep bash
(shows all files that have bash in their name)

—> > (overwrites a file)
- echo Hello World! > hello.txt

—> >> (add text to the file)
- echo Good day to you! >> hello.txt

—> wc -w < hello.txt (number of words in the file)
- output: 6

—> cat << EOF (prints everything until the word EOF)

—> [hello = hello] (equal means return value 0)
- echo §?
- output: 0

- [1 = 0]
- echo §?
- output: 1

—> if else statements in name.sh

- if [${1,,} = Herbert]; then
    echo „Welcome boss.“
elif [${1,,} = help]; then
    echo „Enter your username.“
else
    echo „You are not the boss“
fi

Example: bash name.sh Herbert

-> Herbert = Input

—> case statements

- case ${1,,} in
        herbert | administrator)
            echo „Hello Boss.“
            ;;
        help)
            echo „Enter a username.“
            ;;
        *)
            echo „Hello who are you?“

esac

=> * means catch all other cases

—> lists

- MY_FIRST_LIST = (one two three four five)
  echo MY_FIRST_LIST

Output: one

- echo ${MY_FIRST_LIST[@]}
Output: pints the whole list

- echo ${MY_FIRST_LIST[1]}
Output: two

—> for loops

- for item in ${MY_FIRST_LIST[@]}; do echo -n $item | wc -c; done

Output: 3 3 4 4 5
- prints the length of the words in the list (wc -c)

—> functions

- showuptime(){
    up=$(uptime -p | cut -c4-)
    since=$(uptime -s)
    cat << EOF

— — —
This machine has been up for ${up}
It has been running since ${since}
— — —
EOF

}
showuptime

—> local variables just for the function

local up=$(uptime -p | -c4-)
local since=$(uptime -s)

```
#!/bin/bash
showname(){
        echo hello $1
        if [ ${1,,} = herbert ]; then
                return 0
        else
                return 1
        fi
}
showname $1
if [ $? = 1 ]; then
        echo "Someone unknown called the function!"
fi
```