```bash
#! /bin/bash

# ECHO COMMAND
# echo Hello World!

# VARIABLES
# Uppercase by convention
# Letters, numbers, underscores
NAME="Bob"
# echo "My name is $NAME"
# echo "My name is ${NAME}"

# USER INPUT
# read -p "Enter your name: " NAME
# echo "Hello $NAME, nice to meet you!"

# SIMPLE IF STATEMENT
# if [ "$NAME" == "Brad" ]
# then
#    echo "Your name is Brad"
# fi

# IF-ELSE
# if [ "$NAME" == "Brad" ]
# then
#    echo "Your name is Brad"
# else
#    echo "Your name is NOT Brad"
# fi

# ELSE-IF (elif)
# if [ "$NAME" == "Brad" ]
# then
#    echo "Your name is Brad"
# elif [ "$NAME" == "Jack" ]
# then
#    echo "Your name is Jack"
# else
#    echo "Your name is NOT Brad or Jack"
# fi

# COMPARISON
# NUM1=31
# NUM2=5
# if [ "$NUM1" -gt "$NUM2" ]
# then
#    echo "$NUM1 is greater than $NUM2"
# else
#    echo "$NUM1 is less than $NUM2"
# fi

########
# val1 -eq val2 Returns true if the values are equal
# val1 -ne val2 Returns true if the values are not equal
# val1 -gt val2 Returns true if val1 is greater than val2
# val1 -ge val2 Returns true if val1 is greater than or equal to val2
# val1 -lt val2 Returns true if val1 is less than val2
# val1 -le val2 Returns true if val1 is less than or equal to val2
########

# FILE CONDITIONS
# FILE="test.txt"
# if [ -e "$FILE" ]
# then
#    echo "$FILE exists"
# else
#    echo "$FILE does NOT exist"
# fi
```

```bash
########
# -d file    True if the file is a directory
# -e file    True if the file exists (note that this is not particularly portable, thus -f is generally used)
# -f file    True if the provided string is a file
# -g file    True if the group id is set on a file
# -r file    True if the file is readable
# -s file    True if the file has a non-zero size
# -u      True if the user id is set on a file
# -w      True if the file is writable
# -x      True if the file is an executable
########

#CASE STATEMENT
# read -p "Are you 21 or over? Y/N " ANSWER
# case "$ANSWER" in
#   [yY] | [yY][eE][sS])
#     echo "You can have a beer :)"
#     ;;
#   [nN] | [nN][oO])
#     echo "Sorry, no drinking"
#     ;;
#   *)
#     echo "Please enter y/yes or n/no"
#     ;;
# esac

# SIMPLE FOR LOOP
# NAMES="Brad Kevin Alice Mark"
# for NAME in $NAMES
#   do
#     echo "Hello $NAME"
# done

# FOR LOOP TO RENAME FILES
# FILES=$(ls *.txt)
# NEW="new"
# for FILE in $FILES
#   do
#     echo "Renaming $FILE to new-$FILE"
#     mv $FILE $NEW-$FILE
# done

# WHILE LOOP - READ THROUGH A FILE LINE BY LINE
# LINE=1
# while read -r CURRENT_LINE
#   do
#     echo "$LINE: $CURRENT_LINE"
#     ((LINE++))
# done < "./new-1.txt"

# FUNCTION
# function sayHello() {
#   echo "Hello World"
# }
# sayHello

# FUNCTION WITH PARAMS
# function greet() {
#   echo "Hello, I am $1 and I am $2"
# }

# greet "Brad" "36"

# CREATE FOLDER AND WRITE TO A FILE
# mkdir hello
# touch "hello/world.txt"
# echo "Hello World" >> "hello/world.txt"
# echo "Created hello/world.txt"
```