1-

‘’ treats everything literally and doesn’t not allow for variable substitution

“” can allow for variable substitution inside

2-

[ -f filename ]

-f checks if the given path exists and is a regular file.

[ -d dirname ]

-d checks if the given path exists and is a directory.

3-

0 is input, 1 is output , 2 is error

>> is append and add to file without deleting original

> is overwriting the current file content and rewriting

Use cat to display file content of redirected files

4-

Loop in bash:

for i in 1 2 3 4 5; do

echo "Number: $i"

done

simple calculator:

#!/bin/bash

read -p "Enter first number: " a

read -p "Enter operator (+ or -): " op

read -p "Enter second number: " b

if [ "$op" = "+" ]; then

echo "Result: $((a + b))"

elif [ "$op" = "-" ]; then

echo "Result: $((a - b))"

else

echo "Invalid operator (use + or -)"

fi