

# OPERATING SYSTEM 1

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Lecture 5

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# LINUX SHELL SCRIPT

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# Arguments in bash script

## Program

```
#!/bin/bash  
x=$1  
y=$2  
echo $(expr $x + $y)
```

## Output

```
./example.bash 1 4  
5
```

# Example

## Program

```
#!/bin/bash  
d=$(date)  
h=$(echo $d | cut -d' ' -f4 | cut -d':' -f1)  
echo $h
```

## Output

The program will print the hour

# Integer comparison in bash script

- -gt
  - Is equal to: > if [ "\$a" -gt "\$b" ]
- -lt
  - Is equal to: < if [ "\$a" -lt "\$b" ]
- -eq
  - Is equal to: == if [ "\$a" -eq "\$b" ]
- -ne
  - Is equal to: != if [ "\$a" -ne "\$b" ]
- -ge
  - Is equal to: >= if [ "\$a" -ge "\$b" ]
- -le
  - Is equal to: <= if [ "\$a" -le "\$b" ]

# If Statement in bash script

## Program

```
#!/bin/bash
x=1
y=2
z=$(expr $x + $y)
if [ $z -gt 2 ]; then
echo "YES"
else
echo "NO"
fi
```

## Output

YES

# Loop in bash script

## Program

```
#!/bin/bash
x=1
while [ $x -lt 10 ];
do
echo $x
x=$((x+1))
done
```

## Output

```
1
2
3
4
5
6
7
8
9
```

# Loop 2 in bash script

## Program

```
#!/bin/bash  
for ((n=1;n<=10;n++))  
do  
echo $n  
done
```

## Output

```
1  
2  
3  
4  
5  
6  
7  
8  
9
```



# Loop 3 in bash script

## Program

```
#!/bin/bash  
for var in canada usa mex  
do  
echo $var  
done
```

## Output

```
canada  
usa  
mex
```

# EXERCISES

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# Exercise 1

- Write a program that get two numbers (n – r).
  - If n equal 1 then print the area of the circle.
  - If n equal 2 then print the circumference of circle.
  - Else print “Wrong Input!”.
- Note:
  - n: option.
  - r: radius.

# Exercise 2

- Write a program that get one string (str).
  - If str equal "odd" print odd numbers from (1 -> 100).
  - If str equal "even" print even numbers from (1->100).