OPERATING SYSTEM 1

Lecture 7

Eng. Joud Khattab

LINUX SHELL SCRIPT

Read values in bash script

Program
#! /bin/bash
read x
echo "print $x"

Output
./example.bash
5
print 5

Function in shell script

Program	Output

```
#! /bin/bash
function calc
{
        x=$1
        y=$2
        z1=$(($x+$y))
        z2=$(($x-$y))
        echo $z1
        echo $z2
}
calc 3 5
sum=$(calc 3 5)
echo $sum
```

```
./example.bash
8
-2
8 -2
```

EXERCISES

Exercise 1

- Using loop statements Write a program that print:

  ```
  *
  **
  ***
  ****
  *****
  ****
  ***
  **
  *
  ```

Exercise 1

Program

```bash
#! /bin/bash

for ((i=1;i<6;i++)); do
        for ((j=0;j<$i;j++)); do
                echo -n '*'
        done
        echo
done

for ((i=4;i>0;i--)); do
        for ((j=0;j<$i;j++)); do
                echo -n '*'
        done
        echo
done
```

Exercise 2

- Write a program that get two numbers (x and y) and print the result of:
  - $x \wedge y$

Exercise 2

Program

```
#! /bin/bash

x=$1
y=$2
z=1
for (( i = 0; i < $y; i++ )); do
        z=$(expr $x \* $z)
done
echo $z
```

Exercise 2

Program

```
#! /bin/bash

function product
{
          x=$1
          y=$2
          z=1
          for (( i=0; i < $y; i++ )); do
                    z=$(expr $x \* $z)
          done
          echo $z
}

read n1
read n2
x=$(product $n1 $n2)
echo $x
```

Exercise 3

- Write a program that get one number and print if it's a prime number or not.