

## Week 14

### Functions

1. Write a function that doubles a number. The function should print the original number given and the doubled one.

```
# This function doubles a number

function dbl {
    read -p "Enter a value: " value
    double=$(( $value * 2 ))
    echo "Double $value is $double"
}

dbl
```

2. Write a function for calculating the area of a rectangle. The function will print the area. Use this function for calculating the area of a number n of rectangles, where n is given by the user.

```
# Creating and using a function in a script
# Calculating the area of a rectangle

function areaR {
    read -p "Enter width: " width
    read -p "Enter length: " length
    ((area=width*length))
    echo "Area of the rectangle with dimensions $width and $length is $area "
}

count=1
read -p "How many rectangles are you calculating the area for? " n
echo

while [ $count -le $n ]
do
    echo "Rectangle $count: "
    areaR
    echo
    count=$(( $count + 1 ))
done
```

3. Create a script that displays a menu with three options:  
Option 1 displays a greeting  
Option 2 doubles a number  
Option 3 exits the program  
Make use of functions for this task

```

# Script menu with functions

function func1 {
    echo "Hello there "
}

function dbl {
    echo "You chose to double a number."
    read -p "Enter a value: " value
    echo "Double $value is $[ $value * 2 ] "
}

# simple script menu

clear
echo

echo -e "\t1. Greeting"
echo -e "\t2. Double a number"
echo -e "\t0. Exit program\n\n"

echo -en "\t\tEnter option: "

read -n 1 option

case $option in
0)
exit ;;
1)
echo; func1 ;;
2)
echo; dbl ;;
*)
clear
echo "Sorry, wrong selection";;
esac

```