

Activity 3:

1. Write a script called mycase, using the case utility to check the type of character entered by a user:

- a. Upper Case.
- b. Lower Case.
- c. Number.
- d. Nothing.

```
printf 'Please enter a character: '
IFS= read -r c
case $c in
  ([:lower:]) echo lowercase letter;;
  ([:upper:]) echo uppercase letter;;
  ([:alpha:]) echo neither lower nor uppercase letter;;
  ([:digit:]) echo decimal digit;;
  (*) echo anything else;;
esac
```

2. Enhanced the previous script, by checking the type of string entered by a user:

- a. Upper Cases.
- b. Lower Cases.
- c. Numbers.
- d. Mix. (Upper and lower cases)
- e. Nothing.

```
#!/bin/bash
```

```
read -p "Enter string: " str
echo "Your input is: $str"
```

```
strUppercase=$(printf '%s\n' "$str" | awk '{ print toupper($0) }')
strLowercase=$(printf '%s\n' "$str" | awk '{ print tolower($0) }')
```

```
if [ -z "${str//[0-9]}" ]
then
  echo "Digit"
elif [ $str == $strLowercase ]
then
  echo "Lowercase"
elif [ $str == $strUppercase ]
then
  echo "Uppercase"
elif [ $str == $strUppercase && $str == $strLowercase ]
then
  echo "string is mixed"
```

```

else
echo "Something else"
fi

```

4. Design a script that accept 3 arguments (option [-i, -c, -d], word, file) based on the option if it:

-i: print the lines that contain the given word.

-c: print the number of matched given word.

-d: print the file after deleting the lines that contain the given word.

```

#!/bin/bash
case $1 in
"-i" )
grep -F $2 input.txt ;;
"-c" )
grep -o -i $2 input.txt | wc -l ;;
"-d" )
grep -v $2 input.txt;;
esac

```

5. Write a script called myfruit, using the case and select utility to list fruit option (apple, banana and kiwi):

- if select apple option, list another three options for me (red, yellow, green) and after selection return to first list.
- if select banana option, list another two options for me (yellow, green) and after selection return to first list.
- Break the script when select quit option

```

#!/bin/bash
select fruit in apple banana kiwi quit
do
case $fruit in
"apple" )
echo "choose color of your choose"
select color in red yellow green
do
case $color in
"red" )
echo "you choose fruit $fruit and color $color ";;
"yellow" )
echo "you choose fruit $fruit and color $color ";;
"green")

```

```

        echo "you choose fruit $fruit and color $color ";;
    *)
        echo " No color found "
        ;;
    esac
done ;;

"banana" )
echo "choose color of your choose"
select color in yellow green
do
case $color in
"yellow" )
    echo "you choose fruit $fruit and color $color ";;
"green" )
    echo "you choose fruit $fruit and color $color ";;
*)
    echo " No color found ";;

esac
done

;;
"quit" )
    echo exit ;;

esac
done

```

6. Design a script using the case and select utility to list some countries and when we select a country it print the language of that country.

```

#!/bin/bash
select countries in egypt usa hind exit
do
case $countries in
"egypt" )
echo "the language of this countries is : Arabic";;
"usa" )
echo "the language of this countries is : English";;
"hind" )
echo "the language of this countries is : hindi";;
"exit" )

```

```
exit ;;
```

```
esac  
done
```

7. Create a Bash script which will take 2 numbers as command line arguments. It will print to the screen the larger of the two numbers.

```
#!/bin/bash  
if [[ $1 -gt $2 ]]  
then  
echo "the largest number is $1"  
  
else  
echo "the largest number is $2"  
fi
```

8. Create a Bash script which will accept a file as a command line argument and analysis it in certain ways. e.g. you could check if the file is executable or writable. You should print a certain message if true and another if false.

```
#!/bin/bash  
FILE="$1"  
if [[ -w "$FILE" || -x "$FILE" ]]  
then  
echo "true $FILE"  
else  
echo "false on $FILE"  
fi
```

9. Create a Bash script which will print a message based upon which day of the week it is (e.g. 'Happy weekend day' for Friday and Saturday).

```
#!/bin/bash  
select day in saturday sunday monday tuesday wednesday thursday friday exit  
do  
case $day in  
"saturday"|"friday")  
echo "happy weekend $day";;  
"sunday" )  
echo "happy first day of work $day";;  
"monday" )
```

```
echo "happy second day of work : $day";;  
"tuesday" )  
echo "happy third day of work : $day";;  
"wednesday" )  
echo "happy fourth day of work : $day";;  
"thursday" )  
echo "happy fifth day of work : $day";;  
"exit" )  
exit ;;
```

```
esac  
done
```