Shell Scripts

1. Read

- read –t 3 text
    - Terminal waits for 3 seconds to get user input. If time elapsed, it exists.
- Read –s text
    - User inputs are not displayed

2. echo

- echo –n “Enter some text > “
    - The cursor is placed in the same line.

3. more

- Displays one page at a time
- No backwards scrolling
- Space bar -> One screen up
- Enter -> One line up
- q -> quit
- Example
    - ls –l /usr/bin | more

4. less

- More sophisticated solutions than more
- j/k -> movement one line
- f/b -> Movement by one window at a time
- h -> help window
- q -> quit

5. uniq

- Removes the duplicate entries
- Compares only if entries are adjacent to each other

6. sort

- Arranges the contents of the file in Ascending order.

7. String Concatenation

```
#!/bin/bash
x="Hello"
y=" World"
z=$x$y
echo $z
```

8. String Comparison

```
#!/bin/bash
echo -n "Enter text compare -> "
read text
if [ $text = "yes" ]; then
        echo "Strings are equal"
else
        echo "Strings are not equal"
fi
```

9. Nested If Loop

```
#!/bin/bash
echo -n "Enter a number between 1 and 3 inclusive > "
read character
if [ "$character" = "1" ]; then
        echo "You entered one."
```

```
elif [ "$character" = "2" ]; then
        echo "You entered two."
elif [ "$character" = "3" ]; then
      echo "You entered three."
else
      echo "You did not enter a number"
      echo "between 1 and 3."
fi
```

10. For Loop

```
#!/bin/bash

for i in word1 word2 word3; do
   echo $i
done
```

11. While Loop

```
#!/bin/bash

number=0
while [ $number -le 10 ]; do
        echo "Number = $number"
        number=$((number+1))
done
```

12. Case

```
#!/bin/bash

echo -n "Type a digit or a letter> "
read character
case $character in

[a-z] | [A-Z] ) echo "you typed the letter $character"
                ;;
[0-9] ) echo "you tyed the digit $character"
        ;;
* ) echo "you did not type a letter"
esac
```

13. Arithmetic Expression

```
#!/bin/bash

first_num=0
second_num=0

echo -n "Enter the first number --> "
read first_num
echo -n "Enter the second number -> "
read second_num
```

```
echo "first number + second number = $((first_num + second_num))"
echo "first number - second number = $((first_num - second_num))"
echo "first number * second number = $((first_num * second_num))"
echo "first number / second number = $((first_num / second_num))"
echo "first number % second number = $((first_num % second_num))"
echo "first number raised to the"
echo "power of the second number   = $((first_num ** second_num))"
```

14. Function

```
#!/bin/bash

function hello
{
        echo "Hello"
}

function world
{
        echo " World"
}

#Execute the Function, Just by calling the function
hello
world
```

15. File Present or not

```
#!/bin/bash

if [ $# -ne 1 ]; then
        echo "Usage - $0 file-name"
        exit 1
fi

if [ -f $1 ]; then
        echo "$1 file exist"
else
        echo "sorry $1 file doesn't exist"
fi
```

16. Directory Present or not

```
#!/bin/bash

if [ $# -ne 1 ]; then
        echo "Please Enter the Directory Name"
        exit 1
fi

if [ -d $1 ]; then
        echo "Directory present"
else
```

```
        echo "Directory Not present"
fi
```