

# Functions

Sankar S

# How to write function

- ❖ Definition of function
- ❖ Calling function
- ❖ Exit Status
- ❖ Read Statement
- ❖ Wild Cards
- ❖ More Command
- ❖ /dev/null file redirection
- ❖ Test command

# Utility Commands

- ❖ Trap Command
- ❖ Shift Command
- ❖ Export Command
- ❖ Hash Command
- ❖ Getops
- ❖ Logout command
- ❖ Umask
- ❖ Set , Unset Commands
- ❖ Let command

# Utility Commands

- ❖ Cut Command
- ❖ Paste Command
- ❖ Join Command
- ❖ Tr command

# Regular Expressions

❖ GREP

❖ SED

❖ AWK

# Regular Expressions

❖ Search and replace all lower case letters to upper case letters

❖ `:1,$ s/[a-z]/\u &/g`

`1,$` - Line Address location is all i.e. find all lines for following pattern

`s` Substitute command

`/[a-z]/` - Find all lowercase letter - Target

`\u&/` Substitute to Uppercase. `\u&` means substitute last patten (&) matched - with its UPPERCASE replacement (`\u`)

Note: Use `\l` (small L) for lowercase character.

`g` - Global replacement

`:1,$ s/[A-Z]/\l&/g`

`:1,$ s/^ *$//`

Note : indicates two black space.

# SED

❖ `sed 's/Linux/UNIX(system v)/'`

Hello World

Am exercising sed utility

Am working in Linux RHEL

```
[ssankar@localhost utils]$ sed 's/Linux/UNIX(system v)/' sed.txt  
Hello World
```

Am exercising sed utility

```
Am working in UNIX(system v) RHEL  
[ssankar@localhost utils]$
```

# AWK

Get the size of the current directory

```
[ssankar@localhost AWK]$ ls -l
```

```
total 8
```

```
-rw-rw-r--. 1 ssankar ssankar 162 Jan 15 11:03 emp.awk
```

```
-rw-rw-r--. 1 ssankar ssankar 77 Jan 15 10:57 empdata.txt
```

```
[ssankar@localhost AWK]$ ls -l | awk '$6 == "Jan" {sum += $5 } END {print sum}'
```

```
239
```

```
[ssankar@localhost AWK]$
```

```
[ssankar@localhost AWK]$ cat empdata.txt
```

```
1 | 100 | sankar | dell | chennai
```

```
2 | 101 | rahul | tcs | chennai
```

```
3 | 102 | pal | cts | bangalore
```

```
[ssankar@localhost AWK]$ gawk '{sum += $1 } END {print sum}' empdata.txt
```

```
6
```

```
[ssankar@localhost AWK]$ awk '{sum += $1 } END {print sum}' empdata.txt
```

```
6
```

```
[ssankar@localhost AWK]$
```



# AWK

Get the size of the current directory

```
[ssankar@localhost AWK]$ cat sum.awk
```

```
BEGIN{  
    FS="|"  
    SNO=1 ;  
    EMPID=2 ;  
    NAME=3 ;  
    COMPANY=4 ;  
    LOCATION=5 ;  
}  
{  
    sum += $1 ;  
}  
END{  
    printf ("%d\n", sum) ;  
}
```

```
[ssankar@localhost AWK]$ gawk -f sum.awk empdata.txt
```

```
6
```

```
[ssankar@localhost AWK]$
```