

Aliases

Alias is a built-in bash command which allows user to create their own command

alias- To view the list of existing aliases in the system

```
emertxe@ubuntu:~$ alias
alias alert='notify-send --urgency=low -i "${[ $? = 0 ] && echo terminal || echo error}" "$(history|tail -n1|sed -e '\''s/^\s*[0-9]\+\s*//;s/;;s/;&]\s*alert$//'\''")"'
alias c='clear'
alias ca='cd /home/emertxe/ECEP/C/assignments'
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -aF'
alias ls='ls --color=auto'
emertxe@ubuntu:~$
```

Figure 1 To list all the aliased command

alias - To create aliased command

```
emertxe@ubuntu:~$ alias rm='rm -i'
emertxe@ubuntu:~$
emertxe@ubuntu:~$ alias
alias alert='notify-send --urgency=low -i "${[ $? = 0 ] && echo terminal || echo error}" "$(history|tail -n1|sed -e '\''s/^\s*[0-9]\+\s*//;s/;;s/;&]\s*alert$//'\''")"'
alias c='clear'
alias ca='cd /home/emertxe/ECEP/C/assignments'
alias egrep='egrep --color=auto'
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alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -aF'
alias ls='ls --color=auto'
alias rm='rm -i'
emertxe@ubuntu:~$
```

Figure 2 To add aliased command

unalias - To remove aliased command

unalias <command _name>

All the aliases created are temporary to the terminal, once the terminal is closed aliases are removed . To make the aliases permanent we should learn about bash files.

Bash files

- Hidden files used by the login as well as non-login shells
- Found in users home directory
- These are some configuration files which gets sourced to bash on every new instance is created

Bash Files - .bash_profile

- Used by the login shell
- Any settings to be carried out while logging in through login shell can be put here
- Found in the user's home directory, if not could be created

Bash Files - .bash_logout

- Any settings to be carried out while logging out through login shell can be put here
- Found in the user's home directory

Bash Files - .bashrc

- Used by the non login shell
- Any settings which is to be carried after you logged into your machine and open a new terminal window
- This is executed on every new instance of the new terminal even if it is in a form of tabs
- So all those the stuff you would like to get sourced the bash while starting, then this would be right file

Bash Files - .bash_history

- A file which stores all the recent user activity on the command prompt for future reference.

- The history command shows the entries of this file

To make the alias permanent we can add the alias in the .bashrc file.

- Open .bashrc file with vi editor
- Go to last line and add alias and save

Now the alias will automatically be added whenever a new tab or terminal is opened.

The Shell Env Variables

- Login-shell's responsibility is to set the non-login shell and it will set the environment variables
- Environment variables are set for every shell and generally at login time
- Environmental variables are set by the system.

env - lists shell environment variable/value pairs

printenv - to print the value of a variable

```
emertxe@ubuntu:~$ printenv $SHELL
emertxe@ubuntu:~$
emertxe@ubuntu:~$ printenv SHELL
/bin/bash
emertxe@ubuntu:~$
emertxe@ubuntu:~$ echo $SHELL
/bin/bash
```

Figure 3 to view the value of environmental variable

```
emertxe@ubuntu:~/New$ printenv HOME
/home/emertxe
emertxe@ubuntu:~/New$
emertxe@ubuntu:~/New$ printenv PWD
/home/emertxe/New
emertxe@ubuntu:~/New$ printenv LOGNAME
emertxe
emertxe@ubuntu:~/New$ printenv PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/opt/microchip/xc8/v2.20/bin:/opt/microchip/xc8/v2.20/bin
emertxe@ubuntu:~/New$
```

Figure 4 to view the value of Environmental variables

- HOME - gives the home directory
- PWD - gives the current working directory
- LOGNAME - gives the name of currently logged in user
- PATH - specifies the directories to be searched for finding command binaries.

export - to set an environmental variable

- To add an environment variable export command can be used

`export <variable_name> = <value>`

- To add a value to an already existing environment variable

`export <variable_name> = ${<variable_name>} : <new_value>`

The above command appends new value to the already existing environmental variable without disturbing the old value.

```
emertxe@ubuntu:~$ export var="123"
emertxe@ubuntu:~$
emertxe@ubuntu:~$ printenv var
123
emertxe@ubuntu:~$
emertxe@ubuntu:~$ export var=$var:"abc"
emertxe@ubuntu:~$
emertxe@ubuntu:~$ printenv var
123:abc
emertxe@ubuntu:~$ █
```

Figure 5 To set env