

# KH4062CEM Skills Development 1 – Lab2 Nour Sharaky -202000149

# Command line cheat sheet:

Ctrl + Tab  Ctrl + Shift + W  Close terminal  Ctrl + L / clear  Clear terminal  Cd  Change directory  Move back one directory  cho  Cd	Ctrl + shift + T	open terminal
Ctrl + L / clear  Cd  Cd  Move back one directory  Cd  Move to home directory  echo  Output a specific message  Is / Is -I  List files in directory  Is -Ia - A  List files and their types in directory  Is -Ih  List files in readable format in directory  Is -IR  Shows all subdirectories  touch  Create a file  rm -I  Remove a file  mkdir  Create directory  pwd  Print current directory  cat  Print files tonlents  head  Print last 10 lines of a file  diff  Check difference between 2 files  mv  Move a file  Returns file path  man  Help show available commands  sudo  Change to admin to run elevated commands	Ctrl + Tab	Navigate between terminal tabs
Cd	Ctrl + shift + W	Close terminal
Cd . Move back one directory  Cd ~ Move to home directory  echo  Is -l Is -l List files in directory  Is -la / Ia -a List files and their types in directory  Is -la / List files and their types in directory  Is -la List files and their types in directory  Is -la List files sorted by last modified time in directory  Is -lh List files in readable format in directory  Is -lR Shows all subdirectories  Create a file  mrdir Remove a file  mkdir Create directory/folders  rmdir Remove directory  pwd Print current directory  cat Print file contents  head Print first 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  mv Move a file  nano Edit a file  locate Returns file path  man Help show available commands	Ctrl + L / clear	Clear terminal
Move to home directory echo Output a specific message  Is / Is -I List files in directory  Is -Ia / Ia -a List files and their types in directory  Is -It List files and their types in directory  Is -It List files sorted by last modified time in directory  Is -Ih List files in readable format in directory  Is -IR Shows all subdirectories  touch Create a file  rm -i Remove a file  mkdir Create directory/folders  rmdir Remove directory  pwd Print current directory  cat Print file contents  head Print first 10 lines of a file  tail Print last 10 lines of a file  check difference between 2 files  cp -p  Wove a file  mv Move a file  op Open a file  locate Returns file path man Help show available commands  sudo Change to admin to run elevated commands	Cd	Change directory
Dutput a specific message  Is / Is -I  List files in directory  Is -Ia / Ia -a  List files and their types in directory  Is -It  List files or and their types in directory  Is -It  List files and their types in directory  Is -Ih  List files in readable format in directory  Is -IR  Shows all subdirectories  touch  Create a file  mkdir  Create directory/folders  rmdir  Remove a file  mkdir  Create directory  pwd  Print current directory  cat  Print file contents  head  Print files to I lines of a file  tail  diff  Check difference between 2 files  Copy a file  mw  Move a file  Open a file  locate  Returns file path  man  Help show available commands	Cd	Move back one directory
List files in directory  Is -la / la -a  List files and their types in directory  Is -lt  List files sorted by last modified time in directory  Is -lh  List files in readable format in directory  Is -lh  List files in readable format in directory  Is -lR  Shows all subdirectories  touch  Create a file  rm -i  Remove a file  mkdir  Create directory/folders  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print file contents  head  Print last 10 lines of a file  diff  Check difference between 2 files  rw  Move a file  mv  Move a file  op  nano  Edit a file  locate  Returns file path  man  Help show available commands	Cd ~	Move to home directory
List files in directory including the hidden ones  Is -F  List files and their types in directory  Is -It  List files sorted by last modified time in directory  Is -Ih  List files in readable format in directory  Is -IR  Shows all subdirectories  touch  Create a file  rm -i  Remove a file  mkdir  Create directory/folders  rmdir  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print first 10 lines of a file  tail  diff  Check difference between 2 files  cp -p  Copy a file  mv  Move a file  op  Open a file  locate  Returns file path  man  Help show available commands  sudo  Change to admin to run elevated commands	echo	Output a specific message
List files and their types in directory  Is -It  List files sorted by last modified time in directory  Is -Ih  List files in readable format in directory  Is -IR  Shows all subdirectories  touch  Create a file  rm -i  Remove a file  mkdir  Create directory/folders  rmdir  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print last 10 lines of a file  diff  Check difference between 2 files  cp -p  Copy a file  mv  Move a file  op  Open a file  locate  Returns file path  man  Help show available commands  sudo  Change to admin to run elevated commands	ls / ls -l	List files in directory
Is -It  List files sorted by last modified time in directory  Is -Ih  List files in readable format in directory  Is -IR  Shows all subdirectories  touch  Create a file  rm -i  Remove a file  mkdir  Create directory/folders  rmdir  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print first 10 lines of a file  tail  Print last 10 lines of a file  Check difference between 2 files  cp -p  Copy a file  mv  Move a file  op  Open a file  nano  Edit a file  locate  Returns file path  man  Help show available commands	Is -la / la -a	List files in directory including the hidden ones
Is -IR Shows all subdirectories  touch Create a file  rm -i Remove a file  mkdir Create directory/folders  rmdir Remove directory  pwd Print current directory  cat Print file contents  head Print first 10 lines of a file  tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  locate Returns file path  man Help show available commands  List files in readable format in directory  Shows all subdirectories  Create a file  Pread directory/folders  Remove directory  Print current directory  Print file contents  Print last 10 lines of a file  Check difference between 2 files  Copy a file  Move a file  Open a file  Returns file path	Is -F	List files and their types in directory
Is -IR  Shows all subdirectories  touch  Create a file  Remove a file  mkdir  Create directory/folders  rmdir  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print first 10 lines of a file  tail  Print last 10 lines of a file  Check difference between 2 files  cp -p  Copy a file  mv  Move a file  op  Open a file  locate  Returns file path  man  Help show available commands  sudo  Change to admin to run elevated commands	Is -It	List files sorted by last modified time in directory
touch  Create a file  Remove a file  mkdir  Create directory/folders  rmdir  Remove directory  pwd  Print current directory  cat  Print file contents  head  Print first 10 lines of a file  tail  Print last 10 lines of a file  Check difference between 2 files  cp -p  Copy a file  mv  Move a file  op  Open a file  locate  Returns file path  man  Help show available commands  Create a file  Create a file  Remove a file  Create directory/folders  Remove a file  Create directory/folders  Returns file path  Help show available commands	Is -Ih	List files in readable format in directory
rm -i Remove a file mkdir Create directory/folders rmdir Remove directory pwd Print current directory cat Print file contents head Print first 10 lines of a file tail Print last 10 lines of a file diff Check difference between 2 files cp -p Copy a file mv Move a file op Open a file locate Returns file path man Help show available commands sudo Change to admin to run elevated commands	Is -IR	Shows all subdirectories
mkdir Create directory/folders rmdir Remove directory  pwd Print current directory  cat Print file contents head Print first 10 lines of a file tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file locate Returns file path man Help show available commands  sudo Create directory/folders  Remove directory  Print current directory  Print file contents  Print file contents  A file  Check difference between 2 files  Copy a file  Returns file  Returns file path  Help show available commands	touch	Create a file
rmdir Remove directory  pwd Print current directory  cat Print file contents  head Print first 10 lines of a file  tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file  locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	rm -i	Remove a file
pwd Print current directory  cat Print file contents  head Print first 10 lines of a file  tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	mkdir	Create directory/folders
cat Print file contents head Print first 10 lines of a file tail Print last 10 lines of a file diff Check difference between 2 files cp -p Copy a file mv Move a file op Open a file locate Returns file path man Help show available commands sudo Change to admin to run elevated commands	rmdir	Remove directory
head Print first 10 lines of a file tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file  locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	pwd	Print current directory
tail Print last 10 lines of a file  diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file  locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	cat	Print file contents
diff Check difference between 2 files  cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file  locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	head	Print first 10 lines of a file
cp -p Copy a file  mv Move a file  op Open a file  nano Edit a file locate Returns file path  man Help show available commands  sudo Change to admin to run elevated commands	tail	Print last 10 lines of a file
mv Move a file op Open a file nano Edit a file locate Returns file path man Help show available commands sudo Change to admin to run elevated commands	diff	Check difference between 2 files
op Open a file nano Edit a file locate Returns file path man Help show available commands sudo Change to admin to run elevated commands	ср-р	Copy a file
nano Edit a file locate Returns file path man Help show available commands sudo Change to admin to run elevated commands	mv	Move a file
locate  Returns file path  Help show available commands  sudo  Change to admin to run elevated commands	ор	Open a file
man Help show available commands sudo Change to admin to run elevated commands	nano	Edit a file
sudo Change to admin to run elevated commands	locate	Returns file path
	man	Help show available commands
apt Advanced Packaging Tool	sudo	Change to admin to run elevated commands
	apt	Advanced Packaging Tool

Apt-get install	Install software packages
apt-get update	Update list of available packages
apt-get upgrade	Install the newest version of available packages
apt-cache pkgnames	List all available packages
hostname	Display hostname of the system
whoami	Display username of the users logged in at the terminal
who	Display list of all the users currently logged in
passwd	Change current user's password
uptime	Display the time for which the system has been up

## Part 1 – getting started with Kali Linux:

```
kali@kali: ~/SkillsDevelopment1/Lab2
File Actions Edit View Help
(kali⊗ kali)-[~]

$ mkdir SkillsDevelopment1
<mark>(kali⊕kali</mark>)-[~]
$ cd <u>SkillsDevelopment1</u>
___(kali⊗ kali)-[~/SkillsDevelopment1]

$ mkdir Lab2
___(kali⊗ kali)-[~/SkillsDevelopment1]

style="color: blue;">(kali⊗ kali)-[~/SkillsDevelopment1]
___(kali⊗kali)-[~/SkillsDevelopment1/Lab2]

$ touch myfile.py
<mark>(kali⊛ kali</mark>)-[~/SkillsDevelopment1/Lab2]
myfile.py
<mark>(kali⊗ kali</mark>)-[~/SkillsDevelopment1/Lab2]
HelloWorld.py
  —(kali⊗kali)-[~/SkillsDevelopment1/Lab2]
$ touch program.py
(kali@kali)-[~/SkillsDevelopment1/Lab2]
state nano program.py
(kali® kali)-[~/SkillsDevelopment1/Lab2]
python3 program.py
enter a number:5
**
***
****
(kali@kali)-[~/SkillsDevelopment1/Lab2]
python3 program.py
enter a number:3
***
──(kali® kali)-[~/SkillsDevelopment1/Lab2]
```

#### python code:

## Part 2 – what is the command:

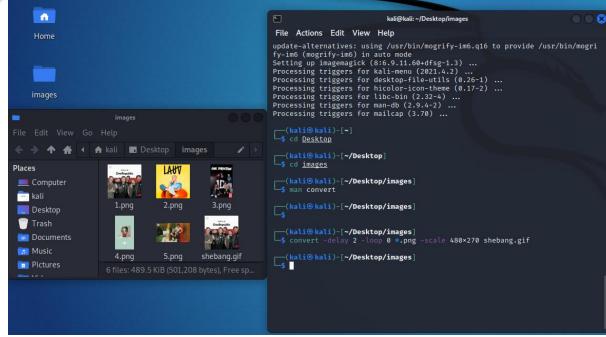
- 1. Command used to copy file: cp
- 2. Command used to delete files: rm & Command used to delete directories: rmdir
- 3. Command used to rename files: rename or mv
- 4. Command used to display contents of a file: cat
- 5. Command to clear terminal: clear

### Part 3 – generate a gif from cmd:

Your favorite singer/band







### Part 4 – install fortune:

Want to read a quote? Maybe something funny, or perhaps an educational message? Fortune is a program that displays a pseudorandom message from a database of quotations.

```
kali@kali: ~/Desktop/images
File Actions Edit View Help
(kali@kali)-[~/Desktop/images]
$ sudo apt-get install fortune
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
Note, selecting 'fortune-mod' instead of 'fortune'
The following additional packages will be installed:
  fortunes-min librecode0
Suggested packages:
  fortunes bsdmainutils
The following NEW packages will be installed:
  fortune-mod fortunes-min librecode0
0 upgraded, 3 newly installed, 0 to remove and 375 not upgraded.
Need to get 648 kB of archives.
After this operation, 2,154 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://kali.download/kali kali-rolling/main amd64 librecode0 amd64 3.6-
24 [531 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 fortune-mod amd64 1:1
.99.1-7.1 [49.3 kB]
Get:3 http://kali.download/kali kali-rolling/main amd64 fortunes-min all 1:1.
99.1-7.1 [67.9 kB]
Fetched 648 kB in 1s (511 kB/s)
Selecting previously unselected package librecode0:amd64.
(Reading database ... 268500 files and directories currently installed.)
Preparing to unpack .../librecode0_3.6-24_amd64.deb ...
Unpacking librecode0:amd64 (3.6-24) ...
Selecting previously unselected package fortune-mod.
Preparing to unpack .../fortune-mod_1%3a1.99.1-7.1_amd64.deb ...
Unpacking fortune-mod (1:1.99.1-7.1) ...
Selecting previously unselected package fortunes-min.
Preparing to unpack .../fortunes-min_1%3a1.99.1-7.1_all.deb ...
Unpacking fortunes-min (1:1.99.1-7.1) ...
Setting up librecode0:amd64 (3.6-24) ...
Setting up fortunes-min (1:1.99.1-7.1) ...
Setting up fortune-mod (1:1.99.1-7.1) ...
Processing triggers for libc-bin (2.32-4) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for kali-menu (2021.4.2) ...
 —(kali⊗kali)-[~/Desktop/images]
_s fortune
An honest tale speeds best being plainly told.
                -- William Shakespeare, "Henry VI"
```

#### Part 5 – Install GIMP:

GIMP is a free and open-source raster graphics editor used for image manipulation and image editing, free-form drawing, transcoding between different image file formats, and more specialized tasks

```
<u>-</u>
                           kali@kali: ~/Desktop/images
File Actions Edit View Help
  —(kali⊕kali)-[~/Desktop/images]
$ sudo apt-get update
Get:1 http://kali.download/kali kali-rolling InRelease [30.6 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [18.0 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [40.6
MB]
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [115 kB]
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [15
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [212 kB]
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [9
Fetched 60.1 MB in 1min 8s (882 kB/s)
Reading package lists... Done
  —(kali⊕kali)-[~/Desktop/images]
sudo apt -y install gimp
Reading package lists... Done
Building dependency tree ... Done
Reading state information... Done
The following additional packages will be installed:
  gimp-data libamd2 libbabl-0.1-0 libc-bin libc-dev-bin libc-l10n libc6
  libc6-dev libc6-i386 libcamd2 libccolamd2 libcholmod3 libcolamd2
  libgegl-0.4-0 libgegl-common libgexiv2-2 libgimp2.0 libmetis5 libmng1
  libmypaint-1.5-1 libmypaint-common libraw20 libsuitesparseconfig5
  libumfpack5 locales
Suggested packages:
  gimp-help-en | gimp-help gimp-data-extras glibc-doc libnss-nis
  libnss-nisplus manpages-dev
Recommended packages:
  manpages-dev libc-devtools
The following NEW packages will be installed:
  gimp gimp-data libamd2 libbabl-0.1-0 libcamd2 libccolamd2 libcholmod3
  libcolamd2 libgegl-0.4-0 libgegl-common libgexiv2-2 libgimp2.0 libmetis5
  libmng1 libmypaint-1.5-1 libmypaint-common libraw20 libsuitesparseconfig5
  libumfpack5
The following packages will be upgraded:
  libc-bin libc-dev-bin libc-l10n libc6 libc6-dev libc6-i386 locales
7 upgraded, 19 newly installed, 0 to remove and 834 not upgraded.
Need to get 36.0 MB/37.2 MB of archives.
After this operation, 130 MB of additional disk space will be used.
Get:1 http://kali.download/kali kali-rolling/main amd64 libc-l10n all 2.33-1
[863 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 libc-dev-bin amd64 2.
33-1 [242 kB]
Get:3 http://kali.download/kali kali-rolling/main amd64 libc6-dev amd64 2.33-
1 [2,272 kB]
Get:4 http://kali.download/kali kali-rolling/main amd64 libc6-i386 amd64 2.33
-1 [2,636 kB]
Get:5 http://kali.download/kali kali-rolling/main amd64 locales all 2.33-1 [4
,087 kB]
Get:6 http://kali.download/kali kali-rolling/main amd64 libc6 amd64 2.33-1 [2
```

