

Linux Introduction Activity Sheet: March 2022

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Version: 0.4

Linux Virtual Machine (VM) setup and using		
Step	Activity	Remarks
1	Install virtual box: download from: https://www.virtualbox.org/	<ul style="list-style-type: none">• As on date, VirtualBox 6.1
2	Download Linux lite VirtualBox (VDI) VM from: https://www.osboxes.org/linux-lite/ Linux Lite 5.8 <ul style="list-style-type: none">• Click VirtualBox• Download VirtualBox (VDI) 64bit	<ul style="list-style-type: none">• For 64 bit use: Linux Lite 5.8• If not 64 bit, for 32 bit use: Linux Lite 3.8• You need 4GB or more RAM on your computer to run this Linux VM smoothly• You need 10GB or more of free hard disk space
3	Install 7zip software from: https://www.7-zip.org/	<ul style="list-style-type: none">• Zip/Unzip software
4	Setup VDI file using virtual box Create New VM and use above VDI file and virtual hard disk during setup	<ul style="list-style-type: none">• https://youtu.be/VDh9Re_s6c8
5	Username: osboxes Password: osboxes.org	<ul style="list-style-type: none">• To login into Linux system
6	Install guest edition: Devices -> Inset Guest Editions CD Image... Do following in terminal: <ul style="list-style-type: none">• <code>cd /media/osboxes/VBox_GAs_6.x.xx</code>• <code>sudo ./VBoxLinuxAdditions.run</code>• <code>reboot</code> To share clipboard (Copy paste between Host OS & Guest OS) Devices -> shared Clipboard -> Bidirectional	<ul style="list-style-type: none">• Optional, but very Recommended and useful, for example to copy text from windows to Linux and vice versa.• Change VBox_GAs_6.x.xx to appropriate name on your (Linux) system. For our case it was: VBox_GAs_6.1.32
7	Look around in Linux (Guest) OS using mouse	
8	Open shell/Terminal: Menu -> System -> Terminal Emulator	<ul style="list-style-type: none">• Terminal is used to give commands to Operating System• You can increase/decrease terminal font using: <code>ctrl + /</code> <code>ctrl -</code>
9	Practice commands in shell/terminal: <ul style="list-style-type: none">• <code>ls</code>• <code>cd ~</code>• <code>cd Documents</code>• <code>mkdir c_progs</code>• <code>pwd</code>• <code>free -h</code>• <code>date</code>• <code>cal</code>	<ul style="list-style-type: none">• <code>~</code> is your home directory• <code>..</code> is parent directory• HINT: type half command and use <code><TAB></code> key to get autocompletions for e.g: <code>cd Dow<TAB></code>

	<ul style="list-style-type: none"> • cal 2021 • whoami • cd .. • df -h • man df <p>Google for: basic Linux commands and try those.</p>	
10	<p>Install gedit text editor:</p> <ul style="list-style-type: none"> • sudo apt update • sudo apt install gedit 	<ul style="list-style-type: none"> • Run if you get: Command 'gedit' not found • Require Internet connection
11	<p>To open terminal, click: Menu -> System -> Terminal Emulator</p>	
12	<p>To change time zone, on terminal type: time-admin Unlock -> enter system password Click Time zone and change</p>	Set time zone: Asia/Kolkata
13	<p>Type first hello world program using gedit, on terminal type:</p> <ul style="list-style-type: none"> • gedit hello.c 	
14	<p>Use gcc to compile and run your program:</p> <ul style="list-style-type: none"> • gcc hello.c • ./a.out 	<ul style="list-style-type: none"> • Make some syntax errors and observe gcc command result • Correct syntax errors and re try gcc
15	<p>Type on Terminal:</p> <ul style="list-style-type: none"> • poweroff 	<ul style="list-style-type: none"> • Shutdown your Linux (virtual) machine.