Lab one : Basic Shell Commands and Bash Usage in RHEL 9

Section 1: Logging in and Accessing the System

1. **Login Task (GUI)**:

   o Open the terminal in the GUI of your RHEL 9 system.
   o **Question**: What command do you use to open a terminal in RHEL via the GUI?
   o **Answer:**
      ❖ **ctrl + Alt + t**
      ❖ **or write command in terminal : gnome-terminal**

2. **Login Task (SSH)**:

   o From another system, SSH into the RHEL machine.
   o **Question**: What command did you use to SSH into the system, and what was the IP address of your RHEL machine?
   o **Answer:**
      ❖ **To know users of system use command:**

ls /home/

❖ **To know IP address use command :**
hostname -I   or   ip a

❖ **To change password of user use command:**
passwd ubuntu

❖ **To SSH into the system use command:**
sudo(for root access) ssh username@IP address
sudo ssh ubuntu@172.30.1.2

Section 2: Understanding Bash Shell

3. **Check Default Shell**:

○ Run the command to check which shell you are currently using.

○ **Question**: What is the command to check the current shell? What output did you get?

○ **Answer:**

❖ **To check the current shell use command:**
echo $0

❖ **output: -bash**

4. **Bash Commands**:
   - Run the command echo $SHELL to ensure you're using the bash shell.
   - **Question**: Is /bin/bash shown in your output? If not, which shell are you using?
   - **/usr/bin/zsh**

Section 3: Running Simple Commands

5. **Working Directory**:

   - Use a command to check your current working directory.
   - **Question**: What command did you use, and what directory are you in right now?
   - **pwd**
   - **/home/abdallah-shehawey**

6. **List Files**:
   - Run a command to list all files in the /home directory.
   - **ls /home**
   - **Question**: Which files and folders are present in /home?
   - **ls /home**
   - **abdallah-shehawey**

7. **Display Date**:

- ○ Run a command to show the current date and time.
- ○ **date**
- ○ **Question**: What is the output of the date command?
- ○ **Fri Nov 28 06:50:49 PM EET 2025**

Section 4: Learning Command Syntax

8. **Command with Options**:

- ○ Use the ls command with options to display detailed information about the files in /etc.
- ○ **Question**: What is the command you used to list files in long format? How many files or directories are listed in /etc?
- ○ **ls -l /etc**
- ○ **2112**

Section 6: Using Terminal Shortcuts

9. **Interrupt Process**:

- Run the sleep 100 command, then use a keyboard shortcut to stop the process.
- **Question**: Which shortcut did you use to interrupt the sleep command?
- **Ctrl + c**

10. **Clear Terminal**:

- Use the shortcut to clear the terminal screen.
- **Question**: What is the shortcut to clear the terminal?
  Ctrl + l

11. **Command Autocompletion**:
- Type hos in the terminal and press Tab to auto-complete it to hostname.
- **Question**: Did the Tab key auto-complete the command for you?
- **yes**

Bonus Tasks

12. **Command History**:
- Use the keyboard shortcut to browse through the previous commands you've entered.

- o **Question**: What shortcut allows you to view and re-run previous commands?
- o **Ctrl + R**

13. **Log Out**:

- o Use a terminal shortcut to log out of your current session.
- o **Question**: Which shortcut did you use to log out of the session?
  Ctrl + D