### **User & Group Management**

| **Command** | **Explanation** |
| --- | --- |
| sudo useradd Nabil | Create a new user named **Nabil** |
| sudo passwd Nabil | Set or change password for the user **Nabil** |
| sudo groupadd kings | Create a new group named **kings** |
| sudo usermod -aG kings Nabil | Add **Nabil** to the group **kings** (without removing from other groups) |
| sudo usermod -a -G developer Nabil | Add **Nabil** to the **developer** group too |

### **File and Directory Operations**

| **Command** | **Explanation** |
| --- | --- |
| mkdir gallery | Create a directory called **gallery** |
| cd gallery | Move into the **gallery** directory |
| touch nabil.txt | Create a new empty file called **nabil.txt** |
| touch gallery/image gallery/videos | Create files named **image** and **videos** inside the **gallery** folder |

### **Permissions and Ownership**

| **Command** | **Explanation** |
| --- | --- |
| sudo chown Nabil:kings gallery/pic | Give ownership of gallery/pic to user **Nabil** and group **kings** |

### **Delete Files & Folders**

| **Command** | **Explanation** |
| --- | --- |
| rmdir pic | Remove an **empty** directory named **pic** |
| rm -r pic | Remove **pic** and its contents recursively |
| sudo rm -r pic | Same as above, but with **sudo** in case you don’t have permission |

### **Copy, Move, Rename Files**

| **Command** | **Explanation** |
| --- | --- |
| cp file1.txt /home/nabil/ | Copy **file1.txt** to Nabil's home directory |
| mv file1.txt /home/nabil/ | Move **file1.txt** to that location |
| mv old.txt new.txt | Rename a file from **old.txt** to **new.txt** |

### **Navigation**

| **Command** | **Explanation** |
| --- | --- |
| pwd | Print the current directory you're in |
| cd / | Go to the **root** directory |
| cd /home/nabil | Go to the **nabil's home** directory |
| cd ~ or cd | Quickly return to your **home directory** |

### **Viewing Files**

| **Command** | **Explanation** |
| --- | --- |
| ls -ll | List files with **detailed information** (permissions, owner, size) |
| cat /etc/passwd | View contents of the passwd file (user details) |
| `cat /etc/passwd | grep -i "username"` |

### **Delete a User**

| **Command** | **Explanation** |
| --- | --- |
| sudo userdel username | Delete a user (replace username with the real one) |

### **Switching Users**

| **Command** | **Explanation** |
| --- | --- |
| su nabil | Switch to user **Nabil** (need password) |

### **System Management**

| **Command** | **Explanation** |
| --- | --- |
| sudo apt-get update | Update the system’s package list |
| sudo apt install vim or sudo apt install vim -y | Install the **Vim text editor** |

### **Vim Basics**

| **Action** | **Command** |
| --- | --- |
| Switch to **Insert Mode** | Press i |
| Exit **Insert Mode** | Press Esc |
| Save and exit | :wq |
| Exit without saving | :q! |

### **System Info & Monitoring**

| **Command** | **Explanation** |
| --- | --- |
| uptime | See how long the system has been running |
| df -h | Check **disk space usage** in human-readable format |
| top | Monitor **real-time processes and CPU/memory usage** |