## 1 Login as user student

```
bibek@bibek-H310M-H-2-0:~$ sudo adduser student
Adding user `student' ...
Adding new group `student' (1006) ...
Adding new group 'student' (1000)'...
Adding new user `student' (1002) with group `student' ...
Creating home directory `/home/student' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for student
Enter the new value, or press ENTER for the default
         Full Name []: Student
         Room Number []:
         Work Phone []:
         Home Phone []:
         Other []:
Is the information correct? [Y/n] y
bibek@bibek-H310M-H-2-0:~$ su - student
Password:
student@bibek-H310M-H-2-0:~$ pwd
/home/student
student@bibek-H310M-H-2-0:~$
```

Create file data.dat which is holding information about student like

First name:last name:roll no.:branch:city ram:kumar:40:dbda:pune

```
student@bibek-H310M-H-2-0:~$ nano data.dat
student@bibek-H310M-H-2-0:~$ cat data.dat
Sagar:Puranik:1009:DAI:Pune
Abhishek:Shubhrant:1001:DESDI:Mumbai
Manish:Kumar:1007:DMC:Bangalore
Ankush:Kumar:1002:DMC:Delhi
Chetan:Rohilla:1004:DAC:Delhi
Yogesh:Singh:1010:DBDA:Pune
Deeksha:Kohli:1005:DAC:Delhi
Mukesh:Kumar:1006:DBDA:Pune
Shashank:Baliyan:1008:DMC:Noida
Bibekjyoti:Nath:1003:DBDA:Delhi
student@bibek-H310M-H-2-0:~$
```

```
student@bibek-H310M-H-2-0:~$ cat data.dat
Sagar:Puranik:1009:DAI:Pune
Abhishek:Shubhrant:1001:DESDI:Mumbai
Manish:Kumar:1007:DMC:Bangalore
Ankush:Kumar:1002:DMC:Delhi
Chetan:Rohilla:1004:DAC:Delhi
Yoaesh:Sinah:1010:DBDA:Pune
Deeksha:Kohli:1005:DAC:Delhi
Mukesh:Kumar:1006:DBDA:Pune
Shashank:Baliyan:1008:DMC:Noida
Bibekivoti:Nath:1003:DBDA:Delhi
student@bibek-H310M-H-2-0:~$ sort -t ":" -k 3 data.dat > f1.txt
student@bibek-H310M-H-2-0:~$ cat f1.txt
Abhishek:Shubhrant:1001:DESDI:Mumbai
Ankush:Kumar:1002:DMC:Delhi
Bibekjyoti:Nath:1003:DBDA:Delhi
Chetan:Rohilla:1004:DAC:Delhi
Deeksha:Kohli:1005:DAC:Delhi
Mukesh:Kumar:1006:DBDA:Pune
Manish:Kumar:1007:DMC:Bangalore
Shashank:Baliyan:1008:DMC:Noida
Sagar:Puranik:1009:DAI:Pune
Yogesh:Singh:1010:DBDA:Pune
student@bibek-H310M-H-2-0:~$
```

Separate student names only and store it in f2.txt

```
student@bibek-H310M-H-2-0:~$ cut -d ":" -f 1 data.dat > f2.dat
student@bibek-H310M-H-2-0:~$ cat f2.txt
Sagar
Abhishek
Manish
Ankush
Chetan
Yogesh
Deeksha
Mukesh
Shashank
Bibekjyoti
student@bibek-H310M-H-2-0:~$
```

Count how many students are there

```
Student@bibek-H310M-H-2-0:~$ cat f2.txt
Sagar
Abhishek
Manish
Ankush
Chetan
Yogesh
Deeksha
Mukesh
Shashank
Bibekjyoti
student@bibek-H310M-H-2-0:~$ wc -w f2.txt
10 f2.txt
student@bibek-H310M-H-2-0:~$
```

6 Count how many student are from pune

```
student@bibek-H310M-H-2-0:~$ cat data.dat | cut -d ";" -f 5 | grep Pune | wc -w
3
student@bibek-H310M-H-2-0:~$
```

Count how many students are having branch dbda

```
student@bibek-H310M-H-2-0:~$ cat data.dat | cut -d ";" -f 4 | grep DBDA | wc -w
3
student@bibek-H310M-H-2-0:~$
```

Store all student having branch dbda in f3.txt

```
student@bibek-H310M-H-2-0:~$ cat data.dat | grep DBDA > f3.txt
student@bibek-H310M-H-2-0:~$ cat f3.txt
Yogesh:Singh:1010:DBDA:Pune
Mukesh:Kumar:1006:DBDA:Pune
Bibekjyoti:Nath:1003:DBDA:Delhi
student@bibek-H310M-H-2-0:~$
```