

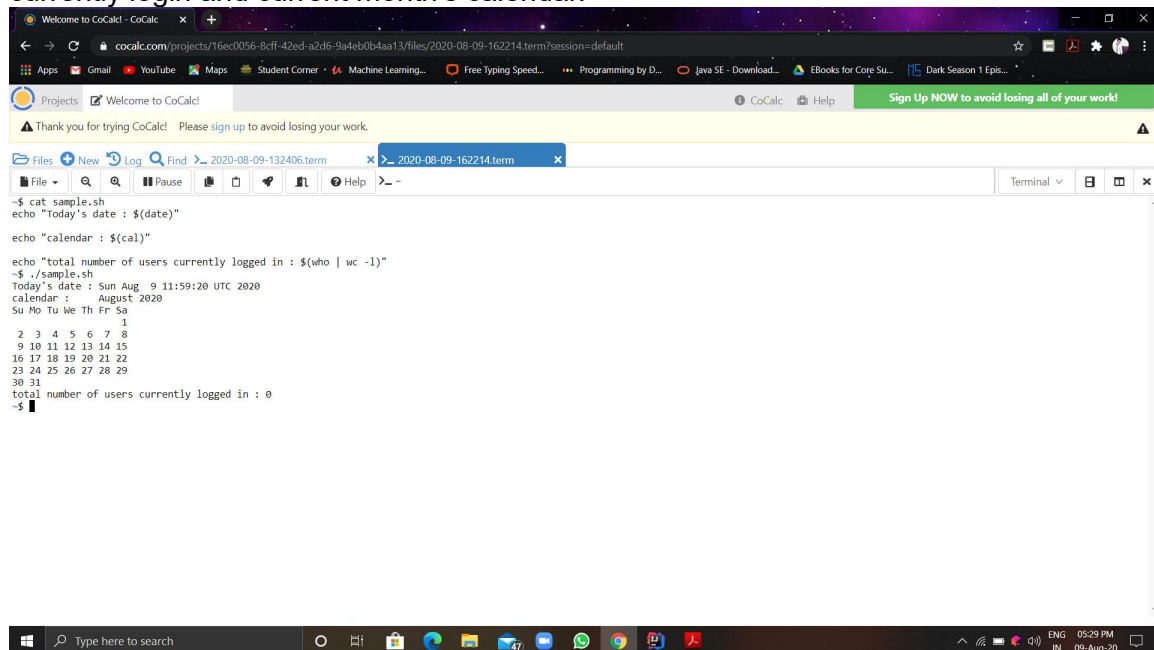
NAME : Krishnaveer Chahar

SECTION-B

ROLL NO : 45(191500410)

SUBMITTED TO : Akhilesh Sir

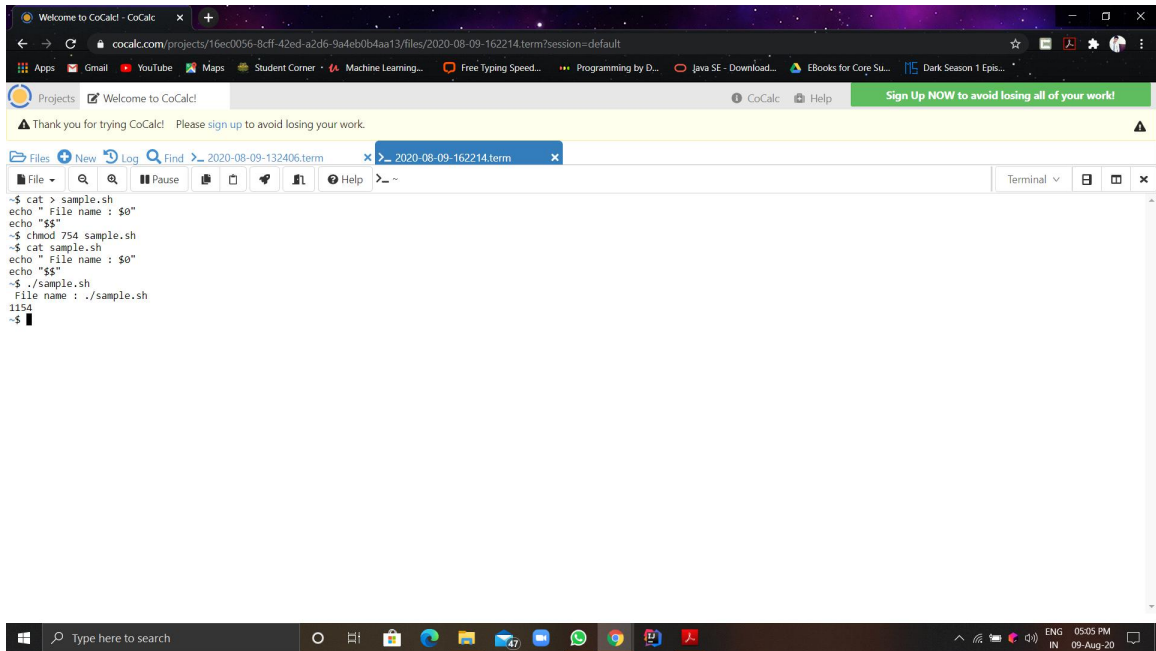
3(a). Write a shell script to display current date in a particular format, number of users currently login and current month's calendar.



The screenshot shows a web browser window with a CoCalc terminal. The terminal displays the following output for the script:

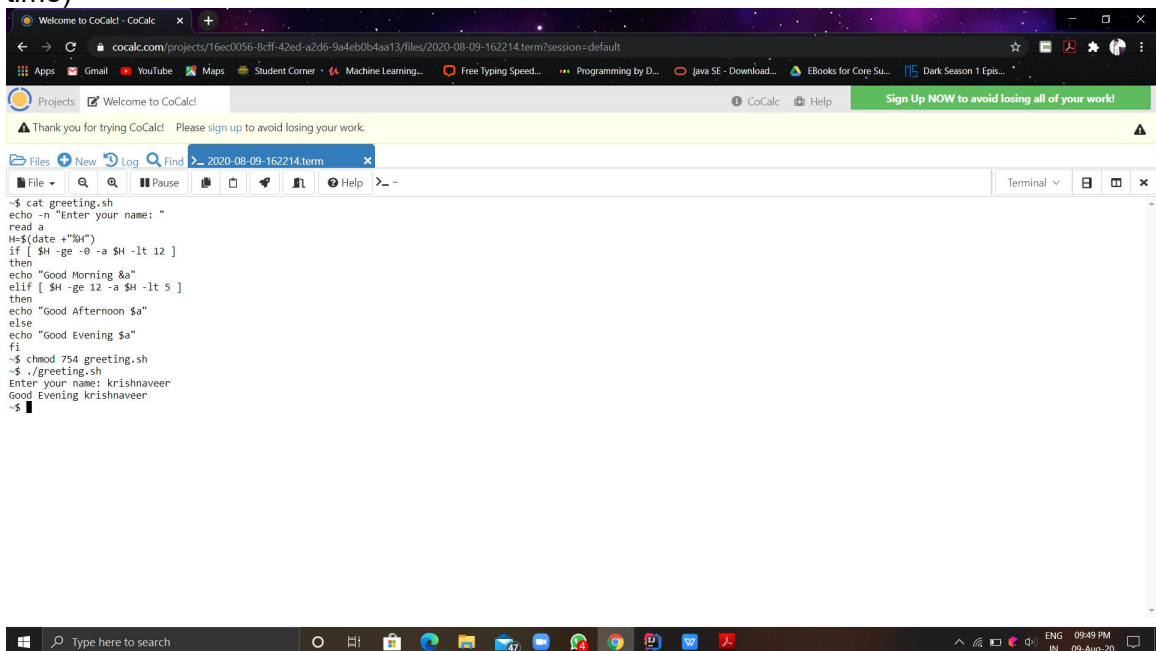
```
~$ cat sample.sh
echo "Today's date : $(date)"
echo "calendar : $(cal)"
echo "total number of users currently logged in : $(who | wc -l)"
~$ ./sample.sh
Today's date : Sun Aug 9 11:59:20 UTC 2020
calendar : August 2020
Su Mo Tu We Th Fr Sa
1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
total number of users currently logged in : 0
~$
```

3(b). Write a shell script to display the process name and its process id.



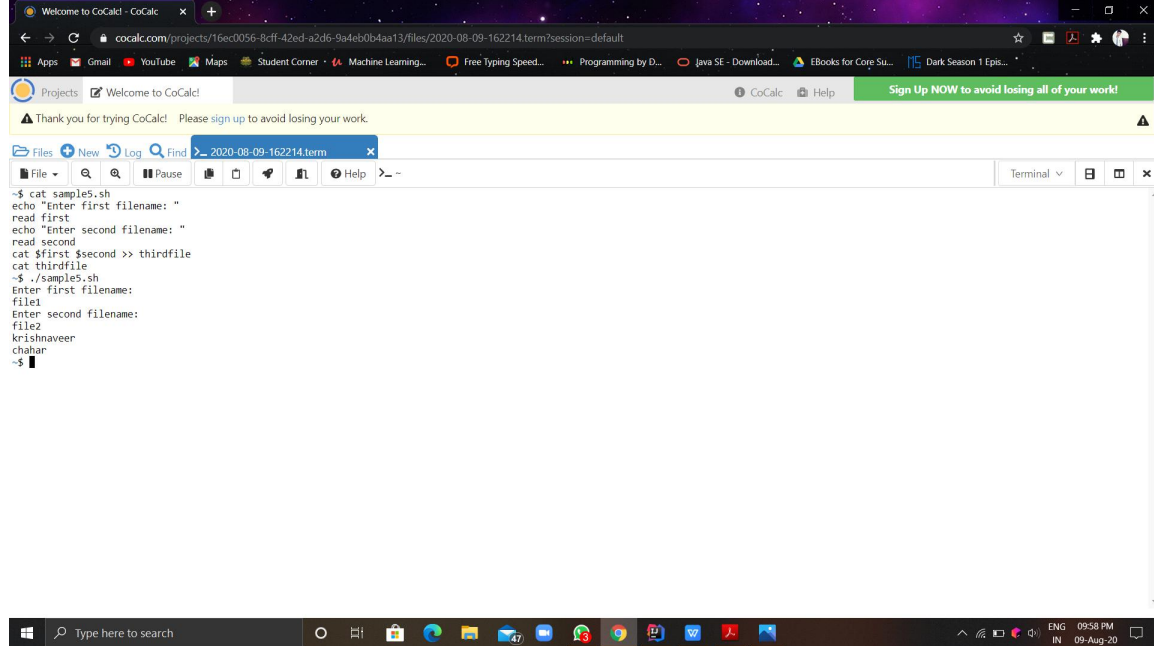
```
~$ cat > sample.sh
echo " file name : $0"
echo "$$"
~$ chmod 754 sample.sh
~$ cat sample.sh
echo " file name : $0"
echo "$$"
~$ ./sample.sh
File name : ./sample.sh
1154
~$
```

3(c). Write a shell script to take name as a input and display a greeting message to the user by checking system clock. (Ex :- Hello John Good Morning in morning time else Hello John Good Afternoon in afternoon time else Hello John Good Evening in Evening time)



```
~$ cat greeting.sh
echo -n "Enter your name: "
read a
H=$(date +"%H")
if [ $H -ge 0 -a $H -lt 12 ]
then
echo "Good Morning &a"
elif [ $H -ge 12 -a $H -lt 5 ]
then
echo "Good Afternoon &a"
else
echo "Good Evening &a"
fi
~$ chmod 754 greeting.sh
~$ ./greeting.sh
Enter your name: krishnaaveer
Good Evening krishnaaveer
~$
```

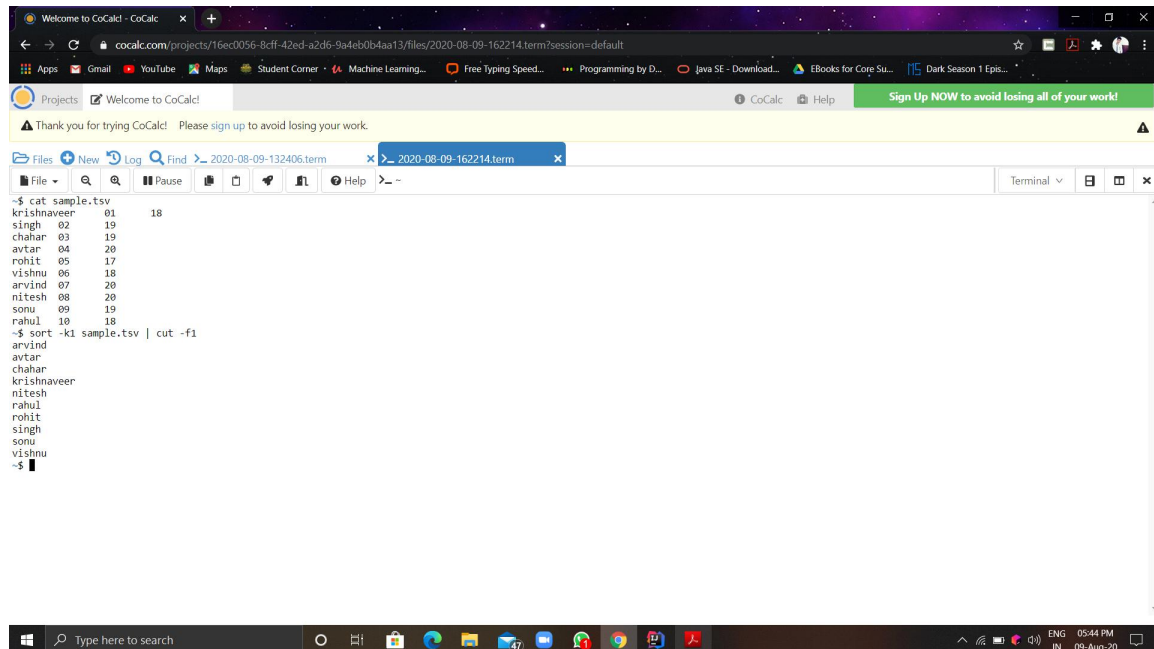
3(d). Write a shell script to merge the content of 2 files into one file.



The screenshot shows a CoCalc terminal window with a shell script named `sample5.sh`. The script prompts the user to enter two filenames, reads their contents, and concatenates them into a third file named `thirdfile`. The user has entered `file1` and `file2`, and the script has successfully merged their contents into `thirdfile`.

```
~$ cat sample5.sh
echo "Enter first filename: "
read first
echo "Enter second filename: "
read second
cat $first $second >> thirdfile
cat thirdfile
~$ ./sample5.sh
Enter first filename:
file1
Enter second filename:
file2
krishnaveer
chahar
~$
```

3(e). Write a shell script to create a tsv file containing name, roll no. and age of 10 students. Then use that tsv file to display only the names of the students in alphabetical order.

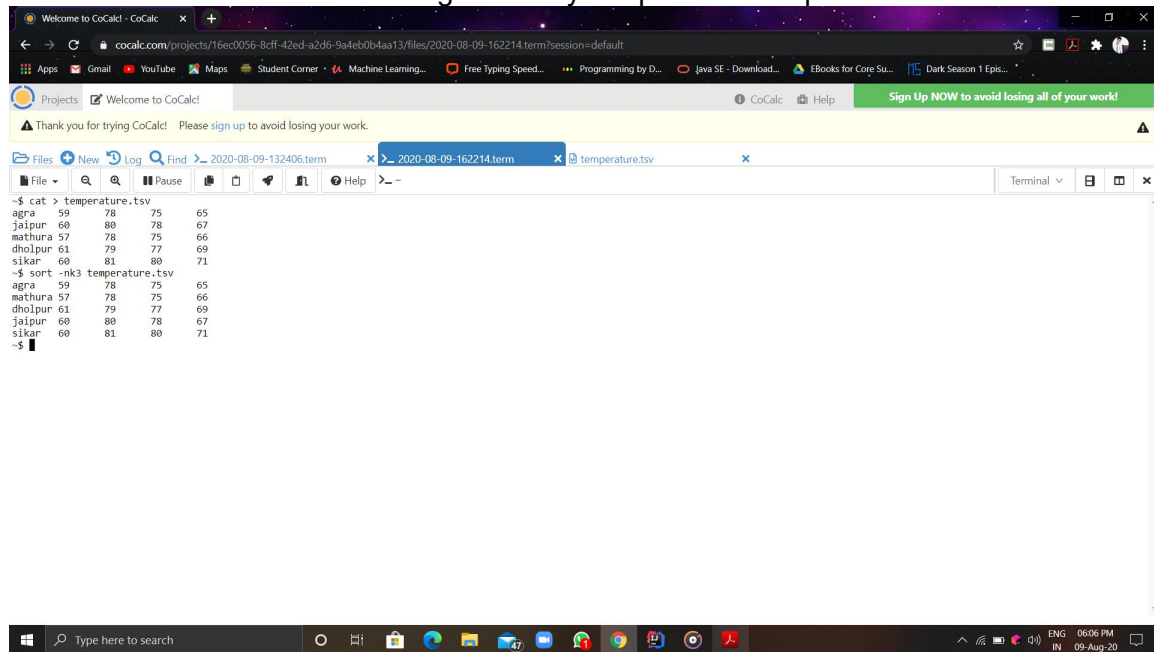


The screenshot shows a CoCalc terminal window with a shell script named `sample.tsv`. The script creates a TSV file with 10 rows of student data (name, roll number, age). It then uses the `sort` command to sort the file by the first column (name) and the `cut` command to display only the names.

```
~$ cat sample.tsv
krishnaveer 01 18
singh 02 19
chahar 03 19
avtar 04 20
rohit 05 17
vishnu 06 18
arvind 07 20
nitesh 08 20
sonu 09 19
rahu1 10 18
~$ sort -k1 sample.tsv | cut -f1
arvind
avtar
chahar
krishnaveer
nitesh
rahu1
rohit
singh
sonu
vishnu
~$
```

3(f). You are given a file of **tab-delimited** weather data (TSV). There is no header column in this data file. The first five columns of this data are: (a) the name of the city (b) the

average monthly temperature in Jan (in Fahrenheit). (c) The average monthly temperature in April (in Fahrenheit). (d) The average monthly temperature in July (in Fahrenheit). (e) the average monthly temperature in October (in Fahrenheit). You need to sort this file on the basis of average monthly temperature in April.



The screenshot shows a web browser window with the CoCalc interface. The terminal window displays the following commands and output:

```
~$ cat > temperature.tsv
agra 59 78 75 65
jaipur 60 80 78 67
mathura 57 78 75 66
dholpur 61 79 77 69
sikar 60 81 80 71
~$ sort -nk3 temperature.tsv
agra 59 78 75 65
mathura 57 78 75 66
dholpur 61 79 77 69
jaipur 60 80 78 67
sikar 60 81 80 71
~$
```

The TSV file contains temperature data for five locations across four months. The output shows the file sorted by the third column (July temperature) in ascending order.

| Location | Jan | Apr | Jul | Oct |
|----------|-----|-----|-----|-----|
| agra | 59 | 78 | 75 | 65 |
| jaipur | 60 | 80 | 78 | 67 |
| mathura | 57 | 78 | 75 | 66 |
| dholpur | 61 | 79 | 77 | 69 |
| sikar | 60 | 81 | 80 | 71 |

