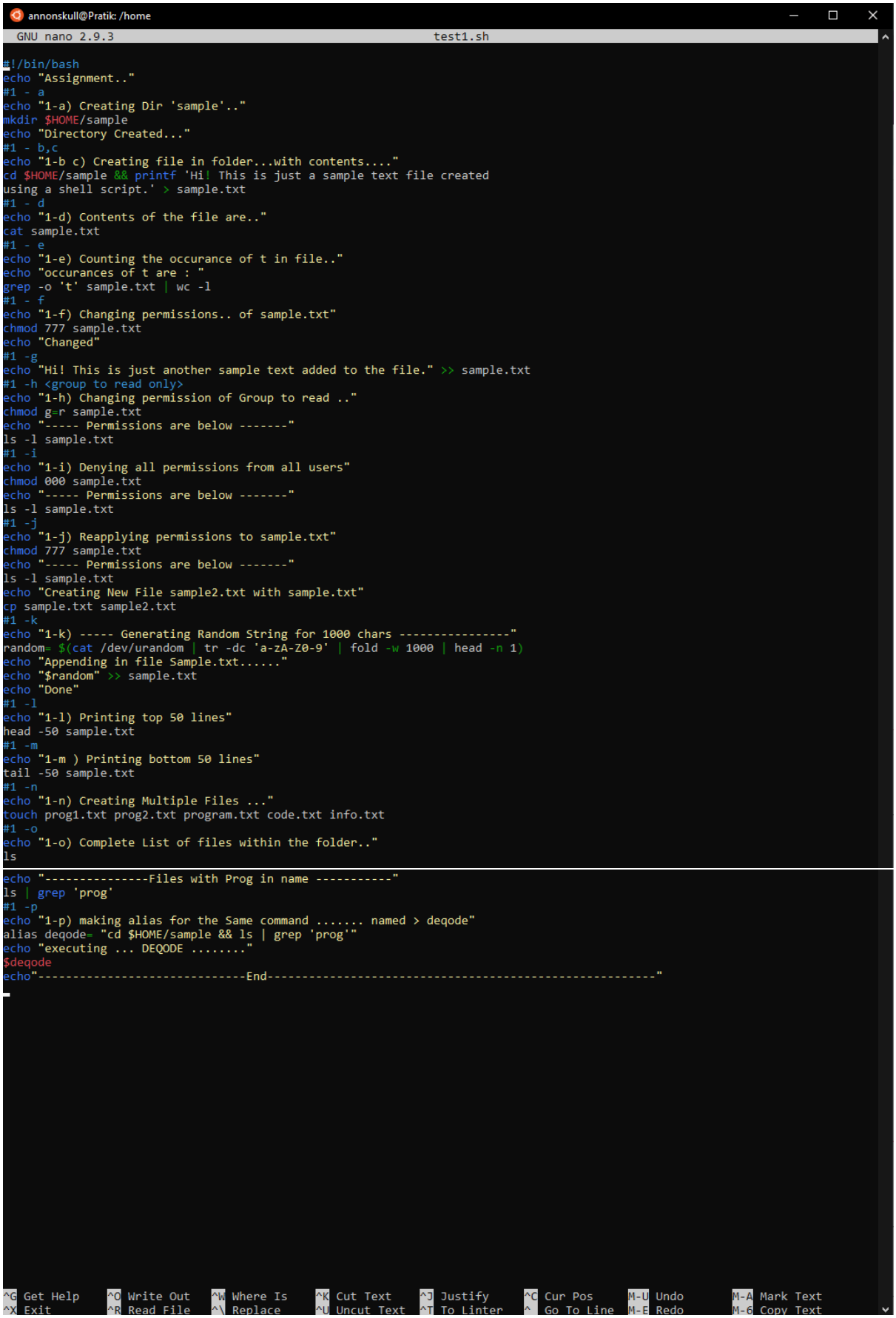
Question 1)


annonskull@Pratik: /home
GNU nano 2.9.3 test1.sh
#!/bin/bash
echo "Assignment.."
#1 - a
echo "1-a) Creating Dir 'sample'.."
mkdir $HOME/sample
echo "Directory Created..."
#1 - b,c
echo "1-b c) Creating file in folder...with contents...."
cd $HOME/sample && printf 'Hi! This is just a sample text file created
using a shell script.' > sample.txt
#1 - d
echo "1-d) Contents of the file are.."
cat sample.txt
#1 - e
echo "1-e) Counting the occurance of t in file.."
echo "occurances of t are : "
grep -o 't' sample.txt | wc -l
#1 - f
echo "1-f) Changing permissions.. of sample.txt"
chmod 777 sample.txt
echo "Changed"
#1 -g
echo "Hi! This is just another sample text added to the file." >> sample.txt
#1 -h <group to read only>
echo "1-h) Changing permission of Group to read .."
chmod g=r sample.txt
echo "----- Permissions are below -------"
ls -l sample.txt
#1 -i
echo "1-i) Denying all permissions from all users"
chmod 000 sample.txt
echo "----- Permissions are below -------"
ls -l sample.txt
#1 -j
echo "1-j) Reapplying permissions to sample.txt"
chmod 777 sample.txt
echo "----- Permissions are below -------"
ls -l sample.txt
echo "Creating New File sample2.txt with sample.txt"
cp sample.txt sample2.txt
#1 -k
echo "1-k) ----- Generating Random String for 1000 chars ----------"
random= $(cat /dev/urandom | tr -dc 'a-zA-Z0-9' | fold -w 1000 | head -n 1)
echo "Appending in file Sample.txt....."
echo "$random" >> sample.txt
echo "Done"
#1 -l
echo "1-l) Printing top 50 lines"
head -50 sample.txt
#1 -m
echo "1-m) Printing bottom 50 lines"
tail -50 sample.txt
#1 -n
echo "1-n) Creating Multiple Files ..."
touch prog1.txt prog2.txt program.txt code.txt info.txt
#1 -o
echo "1-o) Complete List of files within the folder.."
ls
echo "---------------Files with Prog in name -----------"
ls | grep 'prog'
#1 -p
echo "1-p) making alias for the Same command ..... named > deqode"
alias deqode= "cd $HOME/sample && ls | grep 'prog'"
echo "executing ... DEQODE ....."
$deqode
echo"-----------------------------End---"
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos M-U Undo M-A Mark Text
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Linter ^_ Go To Line M-E Redo M-6 Copy Text

Question 2) What is the difference between the source and sh commands?
i) Sh command

- Terminal will use sh or Bourne Shell to execute the program.
- a new process is created because Bash makes an exact copy of itself. This child process has the same environment as its parent, only the process ID number is different.
- execution permission to execute it

ii) Source command

- Program executes with default interpreter
- We execute the process in your current terminal
- No Execution permission is needed

Question 3) Create two files “a.txt” and “b.txt”. Write a command to get the difference between the contents in two files.

$**cat > file1.txt**
$cat > file2.txt
Use the command below to compare the 2 files:
$cmp file1.txt file2.txt

Question 4) What is the difference between ls and lsof?
The LS command is used to show files and folders within the specific directory
The lsof is used to show complete list of files open by the system be it in foreground or background .

Question 5) Create directories ./hello/world (World dir is inside hello dir) using mkdir command where neither hello or world exists. It should be a single command without the use of &&.
$mkdir -p hello/world

Question 6) How can you permanently set an environment variable using a bash terminal?
$var = “varvalue”
$export var

Question 7) You have some process running on a port in your system. How can you view and then kill the process from the terminal?
$sudo kill -9 <PID>