1. **Script your file with filename that has your name**
[hadoop@fedora ~]$ script saniya
Script started, output log file is 'saniya'.

[hadoop@fedora ~]$ echo helloworld
helloworld

[hadoop@fedora ~]$ mkdir sb
[hadoop@fedora ~]$ echo cat bat mat
cat bat mat

[hadoop@fedora ~]$ exit
exit
Script done.
[hadoop@fedora ~]$

2. s**ave the calender of the year 2024 in the file cal24**
[hadoop@fedora ~]$ cal 2024 > cal24.txt

3. **save your last 5 commands in file hist.txt**
[hadoop@fedora ~]$ history | tail -n 5 | cat > hist.txt

4. a**dd first 6 commands from history to this filename**
[hadoop@fedora ~]$ history | head -n 6 | cat >> hist.txt

5. **Create file named input.txt with the following content using the echo commands**
Welcome to Unix Course
Unix is an operating system
Linux is a flavour of Unix and id freely available
[hadoop@fedora ~]$ echo -e "Welcome to Unix Course \n Unix is an operating systen \n Linux is a flavour of unix and is freely available" | cat > input.txt

6. **Save todays date in file cmd.txt without erasing the content of cmd.txt**
[hadoop@fedora ~]$ date | cat >> cmd.txt

7. **save the list of user names in file user.txt**
[hadoop@fedora ~]$ users | cat > user.txt

8. **Save the list of currently logged in users in file user_cr.txt**
[hadoop@fedora ~]$ who | cat > user_cr.txt

9. **find out how long cpu was idle**
[Admin@localhost ~]$ w
 13:11:25 up 2:11, 1 user, load average: 0.26, 0.20, 0.13
USER   TTY   LOGIN@   IDLE   JCPU   PCPU WHAT
Admin   tty1   05:30   7:41m 6:09 26.68s /usr/lib64/libreoffice/progra

10. **display the whole calendar for the current year** → [hadoop@fedora ~]$ cal -y

11. create a file that contains sequences up to n numbers, (n is an initialized variable) use bc

```
[Admin@localhost ~]$ n=10
[Admin@localhost ~]$ seq $n > sequence.txt
[Admin@localhost ~]$ cat sequence.txt
1
2
3
4
5
6
7
8
9
10
```

12. **display the following formatted output**

```
Bold → [hadoop@fedora ~]$ tput bold
color → [hadoop@fedora ~]$ tput setaf 9
[hadoop@fedora ~]$ tput setab 2
```

13. **using command bc, calculate the values of the following expressions**

a. (1456+234)/45

```
[hadoop@fedora ~]$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
(1456+234)/45
37
```

b. **Assign value 10 to var X, then increment by 1, Display the value after increment**

```
x=10
x=x+1
x
1
```

c. **X=10, Y=20 compare values of X and Y and display the result**

```
x=10
y=20
x>y use if
0
```

d. Find logical AND of 10 and 20
10 && 20
1

e. **Find sin 30, cos 30, sin 90, cos60**
sin(30*4*a(1)/180)
Runtime error (func=(main), adr=11): Function a not defined.
s(30*4*a(1)/180)
Runtime error (func=(main), adr=11): Function a not defined.

f. **Find the length of the number (no of digits)**
length(1234567)
7

g. **convert decimal 10 to binary**
obase=2
10
1010

h. Convert decimal 58 to octal
obase=8
58
72

I. convert binary 10111 to octal
ibase=2
obase=8
10111
27

j. convert binary to 1011 to decimal
ibase=2
1011
13

1**4. Find the error if any in each of the foll commands**
a. $cal –> no error
b. $cal -u →invalid option -- 'u'
c. $cal 1944 → no error
d. $cal jan → no error
e. $echo echo → no error
f. $echo-u hello → echo-u: command not found…
g. $echo -u hello → -u hello
h. $echo "-u hello" → -u hello