1.Write how many types of shells.

Bourne Shell

C shell

Bash shell

T shell

Korn Shell

2.Create a shell script file.

```
[root@localhost ~]# gedit hello.sh
```

3.Create a shell script file and execute (hello world)

```
1
2
3  echo "Hello World!"
```

```
[root@localhost ~]# sh hello.sh
Hello World!
```

4.Create a shell script and take the user permission to execute the file.

```
[root@localhost ~]# ./hello.sh
sh: ./hello.sh: Permission denied
[root@localhost ~]# ls -l hello.sh
-rw------- 1 1000 root 19 Jan 31 13:45 hello.sh
[root@localhost ~]# chmod u+x hello.sh
[root@localhost ~]# ./hello.sh
Hello World!
[root@localhost ~]# ls -l hello.sh
-rwx------ 1 1000 root 19 Jan 31 13:45 hello.sh
```

5.How to switch one shell to another shell.(copy and paste)

[root@localhost ~]# echo $0

bash

[root@localhost ~]# sh

$ echo $0

sh

$ exit

[root@localhost ~]#echo $0

bash

[root@localhost ~]# rbash

[root@localhost ~]# echo $0

rbash

6.By using sha-bang execute one file.

```
[root@localhost ~]# sh hello.sh
Hello World!
```

8.To print the number of files in the current working directory .

```
[root@localhost ~]# ls -l
total 24
-rw-r--r-- 1 root root 114 Dec 26  2020 bench.py
-rw-r--r-- 1 root root 185 Sep  9  2018 hello.c
-rwx------ 1 1000 root  19 Jan 31 13:45 hello.sh
-rwx------ 1 1000 root   9 Jan 31 13:37 kk.sh
-rw-r--r-- 1 root root   8 Jan 31 13:58 name
-rw------- 1 1000 root  19 Jan 31 13:56 nme.sh
```

9.To display the number of lines present in the file

```
[root@localhost ~]# wc -l ex.sh
2 ex.sh
```

```
1  echo="good Afternoon"
2  date
3  cal
```

10. print current working directory.

```
[root@localhost ~]# pwd
/root
```

11.write a script to read employee details and save to the emp.txt file.

```
read -p "Enter employee name" Ename
read -p "Enter employee id" Eid
read -p "Enter employee contact no" Eno
read -p "Enter employee email id" Eemail
read -p "Enter employee department" Edepart
```

```
localhost:~# sh emp.txt
Enter employee name John
Enter employee id 34
Enter employee contact no 34234
Enter employee email id dd@gmail.com
Enter employee department IT
```

12.write a script to read name from the end user and if name is sathyathen display Some special messages.

```
read -p "enter name" name
if [ $name = Satya ]
then
echo "hello Satya"
else
echo "hello guest"
fi
```

```
localhost:~# sh name.sh
enter name Satya
hello Satya
```

13. Write a simple if else statement.

a=10

b=20

```
if [ $a == $b ]
then
    echo "a is equal to b"
else
    echo "a is not equal to b"
```

fi

14.Write a simple case statement.

```
read -p "enter any digit from 0 to 5: " no
        case $no    in
            0)
            echo "zero"
            ;;
            1)
            echo "one"
            ;;
            2)
            echo "two"
            ;;
            3)
            echo "three"
            ;;
            4)
            echo "four"
            ;;
            5)
            echo "five"
                        ;;
                            *)
            echo "please enter 0 to 5 only "
         esac
```

Session 2

Create a local git repository

```
Diya@LAPTOP-HO7ALDFU MINGW64 ~ (master)
$ cd desktop

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop (master)
$ mkdir git

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop (master)
$ cd git

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ ls

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git init
Initialized empty Git repository in C:/Users/user/Desktop/git/.git/

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ touch abc.txt

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ ls
abc.txt
```

Commit the initial code and updating file

```
Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ cat>>abc.txt
Hello there!

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ cat abc.txt
Hello there!

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        abc.txt

nothing added to commit but untracked files present (use "git add" to track)

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git add abc.txt
warning: LF will be replaced by CRLF in abc.txt.
The file will have its original line endings in your working directory

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   abc.txt


Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git commit -m "Good Afternoon!"
[master (root-commit) 2ede2ac] Good Afternoon!
 1 file changed, 1 insertion(+)
 create mode 100644 abc.txt
```

```
Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ cat>>abc.txt
updating the file

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ cat abc.txt
Hello there!
updating the file

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   abc.txt

no changes added to commit (use "git add" and/or "git commit -a")

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git commit -a -m "updating abc.txt file"
warning: LF will be replaced by CRLF in abc.txt.
The file will have its original line endings in your working directory
[master a67c897] updating abc.txt file
 1 file changed, 1 insertion(+)

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git status
On branch master
nothing to commit, working tree clean

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git log
commit a67c897013f6ccd69eee2fee32a9cfbf5b93133e (HEAD -> master)
Author: Vedika112 <88924992+Vedika112@users.noreply.github.com>
Date:   Tue Feb 1 15:15:50 2022 +0530

    updating abc.txt file

commit 2ede2ac8e7f2b145ad5a1b430d59321916380712
Author: Vedika112 <88924992+Vedika112@users.noreply.github.com>
Date:   Tue Feb 1 15:13:00 2022 +0530

    Good Afternoon!
```

create and merge branch

```
Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git branch branch1

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ ls
abc.txt

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git branch
  branch1
* master

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (master)
$ git checkout branch1
Switched to branch 'branch1'

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (branch1)
$ git commit -a -m "this is a branch"
On branch branch1
nothing to commit, working tree clean

Diya@LAPTOP-HO7ALDFU MINGW64 ~/desktop/git (branch1)
$ git merge branch1
Already up to date.
```