

OS Lab

Experiment 01:

1. `ls` – It lists the contents of the directory.

```
localhost:~# ls  
bench.py    hello.c     hello.js    readme.txt
```

2. `pwd` – It prints the current working directory

```
localhost:~# pwd  
/root
```

3. `whoami` – It displays the current user name

```
localhost:~# whoami  
root
```

4. `clear` – It clears the terminal screen.

```
localhost:~#
```

5. `mkdir` – It creates a new directory

```
localhost:~# mkdir data
localhost:~# ls
bench.py    data        hello.c     hello.js    readme.txt
```

6. cd – It changes the current working directory

```
localhost:~# cd data
localhost:~/data#
```

7. cd .. – It moves back to the parent directory.

```
localhost:~/data# cd ..
localhost:~#
```

8. rmdir – It deletes the directory.

```
localhost:~# rmdir data
localhost:~# ls
bench.py    hello.c     hello.js    readme.txt
```

9. cat – It displays the contents of the files

```
localhost:~# cat hello.c
#include <stdio.h>
int main(void)
{
    printf("hello world\n");
    return 0;
}
```

10. `cat > hello.txt` – It allows us to create a file named hello.txt and allows to write content in it. Press `Ctrl + D` to save and exit.

```
localhost:~# cat > hello.txt
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localhost:~# ls
bench.py  hello.c  hello.js  hello.txt  readme.txt
localhost:~# cat hello.txt
This is my 1st OS lab practical.
```

11. `cat >> hello.txt` – It appends the content to the hello.txt file.

```
localhost:~# cat >> hello.txt
OS stands for Operating Systems...
localhost:~# ls
bench.py  hello.c  hello.js  hello.txt  readme.txt
```

12. `cp hello.txt bye.txt` – It copies hello.txt file to a new file named bye.txt. Here, hello.txt acts as source file and bye.txt as a destination file.

```
localhost:~# cp hello.txt bye.txt
localhost:~# ls
bench.py  bye.txt  hello.c  hello.js  hello.txt  readme.txt
localhost:~# cat bye.txt
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OS stands for Operating Systems...
```

13. `mv bye.txt file.txt` – It renames or moves bye.txt file to file.txt file. Here, bye.txt is source file and file.txt is destination file.

```
localhost:~# mv bye.txt file.txt
localhost:~# ls
bench.py  file.txt  hello.c  hello.js  hello.txt
localhost:~# cat file.txt
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OS stands for Operating Systems...
```

14. `rm file.txt` – It deletes the file 'file.txt'.

```
localhost:~# rm file.txt
localhost:~# ls
bench.py    hello.c    hello.js    hello.txt    readme.txt
localhost:~#
```

OUES. Create a directory with name `animal`, now add 2 more directories an animal namely `mammal` and `reptile`. In `mammal` directory create files `cow.txt` and `lizard.txt` with 2 line of text in both the files. Now use `mv` command to move `lizard.txt` from `mammal` to `reptile` directory.

1. Create the animal directory

```
localhost:~# mkdir animal
```

2. Navigate to the animal directory

```
localhost:~# cd animal
```

3. Create `mammal` and `reptile` directories inside `animal`

```
localhost:~/animal# mkdir mammal reptile
```

4. Create `cow.txt` and `lizard.txt` files in `mammal`

a. Create `cow.txt`:

```
localhost:~/animal# cat> mammal/cow.txt
cow is a mammal
it provides milk
```

b. Create `lizard.txt`:

```
localhost:~/animal# cat> mammal/lizard.txt
lizards are reptile
they are scary
```

5. List contents of `mammal` directory to verify files

```
localhost:~/animal# ls mammal  
cow.txt      lizard.txt
```

6. Move lizard.txt from mammal to reptile

```
localhost:~/animal# mv mammal/lizard.txt reptile/
```

7. Verify the move using ls
 - a. For mammal directory:
 - b. For reptile directory:

```
localhost:~/animal# ls mammal  
cow.txt  
localhost:~/animal# ls reptile  
lizard.txt
```