

Pipe and Redirection Operations Assignments

1. Create a script named “myscript” in current directory to do the following.
 - a) create a dir named “subd1” in current directory
 - b) create a file named “dircontent” with contents of the current directory
 - c) display the contents of the file “dircontent”
 - d) display the contents of a non existing file named “unknownfile”

vi myscripts

mkdir subd1

ls > dircontent

cat dircontent

cat unknownfile

```
1 #!/bin/bash
2
3 mkdir subd1
4 ls > dircontent
5 cat dircontent
6 cat unknownfile
7
8
9
10
~
```

```
drwxrwxr-x  3 user72 user72 4096 Nov  5 17:46 ./
drwx----- 20 user72 user72 4096 Nov  5 17:46 ../
-rw-rw-r--  1 user72 user72  274 Nov  5 16:04 chai.text
-rw-rw-r--  1 user72 user72  405 Nov  5 17:46 chai.txt
-rwxrwxr-x  1 user72 user72   95 Nov  5 15:19 myscripts.sh*
drwxrwxr-x  2 user72 user72 4096 Nov  5 15:18 test/
user72@trainux01:~/Assignments$ cd test
user72@trainux01:~/Assignments/test$ vi myscripts
user72@trainux01:~/Assignments/test$ chmod +x myscripts
user72@trainux01:~/Assignments/test$ ./myscripts
dircontent
myscripts
subd1
cat: unknownfile: No such file or directory
user72@trainux01:~/Assignments/test$
```

2. Run the script and validate the output in following cases
 - a) Redirect only the stdout to an o/p file named stdout.txt
 - b) Redirect only the stderr to an o/p file named stderr.txt
 - c) Redirect both stdout and stderr to an o/p file named stdall.txt
 - d) Display all o/p and error and also redirect both stdout and stderr to an o/p file named stdall.txt

Ans: ./myscripts > stdout.txt

```
./myscripts > stderr.txt
./myscripts > stdall.txt > stderr.txt >& stdout.txt
./myscripts >> (tee stdall.txt) > stderr.txt >& stdout.txt
```

```
user72@trainux01:~/Assignments/test$ ./myscripts > stdout.txt
mkdir: cannot create directory 'subdl': File exists
cat: unknownfile: No such file or directory
user72@trainux01:~/Assignments/test$ ./myscripts > stderr.txt
mkdir: cannot create directory 'subdl': File exists
cat: unknownfile: No such file or directory
user72@trainux01:~/Assignments/test$ ll
total 28
drwxrwxr-x 3 user72 user72 4096 Nov  5 18:00 ./
drwxrwxr-x 3 user72 user72 4096 Nov  5 17:46 ../
-rw-rw-r-- 1 user72 user72   49 Nov  5 18:00 dircontent
-rwxrwxr-x 1 user72 user72   76 Nov  5 17:56 myscripts*
-rw-rw-r-- 1 user72 user72   49 Nov  5 18:00 stderr.txt
-rw-rw-r-- 1 user72 user72   38 Nov  5 18:00 stdout.txt
drwxrwxr-x 2 user72 user72 4096 Nov  5 17:54 subdl/
user72@trainux01:~/Assignments/test$ ./myscripts > stdall.txt stderr.txt>&stdout.txt
user72@trainux01:~/Assignments/test$ ./myscripts >> (tee stdall.txt) stderr.txt>&stdout.txt
-bash: syntax error near unexpected token `>'
user72@trainux01:~/Assignments/test$ ./myscripts >>(tee stdall.txt) stderr.txt>&stdout.txt
```

3. Redirect the output of command below using pipe (|) to wc and get the output

Ans: ls -l |wc

```
user72@trainux01:~/Assignments/test$ ./myscripts >>(tee stdall.txt) stderr.txt>&stdout.txt
user72@trainux01:~/Assignments/test$ ls -l | wc
  7      56     339
7001  11001  11001  11001  11001  11001
```