PRACTICAL : 8

AIM : Shell programming using filters (including grep, egrep, fgrep)

Source code :

```
#!/bin/bash

# Check if files are provided as arguments
if [ $# -eq 0 ]; then
  echo "Please provide at least one file to process."
  exit 1
fi

echo "1. Using grep to find lines with 'ram' or 'sam':"
# Using extended regex with grep -E or egrep
grep -E "(r|s)am" "$@"
echo ” ----------”

echo "2. Using egrep to find lines with 'ram' or 'sam':"
egrep "(r|s)am" "$@"
echo ” ----------”

echo "3. Using fgrep to find literal 'hello world':"
fgrep "hello world" "$@"
echo “----------”
```

```
echo "4. Chaining filters to extract and sort numbers:"

# Match lines that contain only digits, then sort them numerically

egrep "^[0-9]+$" "$@" | sort -n

echo “----------”
```

Output:

```
ubuntu@ubuntu:~/Desktop$ echo -e "ram is here\nsam I am\ntam tam\nhello worl\n123\n45\nhello there" >greping.txt
ubuntu@ubuntu:~/Desktop$ echo -e "goodbye\nhello world again\nram agai" > another.txt
ubuntu@ubuntu:~/Desktop$ ./filter_script.sh greping.txt another.txt
1. Using grep to find lines with 'ram' or 'sam':
---------------------------------------
2. Using egrep to find lines with 'ram' or 'sam':
greping.txt:ram is here
greping.txt:sam I am
another.txt:ram agai
---------------------------------------
3. Using fgrep to find literal 'hello world':
another.txt:hello world again
---------------------------------------
4. Chaining filters to extract and sort numbers:
45
123
---------------------------------------
```