

ROLL NO : 422176

NAME : KOTA VENKATA CHARAN TEJA

SECTION:A

QUESTION:

Write shell script for pattern matching using awk, sed utilities, tar , cpio

awk.sh

```
#!/bin/bash
echo -e "awk '{print}' Text1.txt OUTPUT: \n";
awk '{print}' Text1.txt;
echo -e "\nawk '/manager/{print}' Text1.txt OUTPUT: \n";
awk '/manager/{print}' Text1.txt;
echo -e "\nawk '{print $2,$5}' Text1.txt OUTPUT: \n";
awk '{print $2,$5}' Text1.txt;
echo -e "\nawk '{sum += $3 } END { print sum }' Text1.txt OUTPUT: \n";
awk '{sum += $3 } END { print sum }' Text1.txt;
echo -e "\nawk '{sum += $3 } END { print sum / NR }' Text1.txt OUTPUT: \n";
awk '{sum += $3 } END { print sum / NR }' Text1.txt;
echo -e "\nawk '{ print substr($2,2,4) }' Text1.txt OUTPUT: \n";
awk '{ print substr($2,2,4) }' Text1.txt;
echo -e "\nawk '{ print $NF }' Text1.txt OUTPUT: \n";
awk '{ print $NF }' Text1.txt;
echo -e "\nawk '{ if ($3 > 500) { print \"senior\" } else { print \"junior\"} }' Text1.txt OUTPUT: \n";
awk '{ if ($3 > 500) { print \"senior\" } else { print \"junior\"} }' Text1.txt;
echo -e "\nawk 'function cube(x) { return x*x*x } {print cube($3) }' Text1.txt OUTPUT: \n";
awk 'function cube(x) { return x*x*x } { print cube($3) }' Text1.txt;
```

OUPUT:

awk '{print}' Text1.txt OUTPUT:

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 sales
5 ATUKURI 500 22 account
```

6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 clerk
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager

awk '/manager/{print}' Text1.txt OUTPUT:

1 KOTA 100 18 manager
3 CHARAN 300 20 manager
10 AKKI 1000 27 manager

awk '{print ,}' Text1.txt OUTPUT:

KOTA manager
VENKATA clerk
CHARAN manager
TEJA sales
ATUKURI account
MAITHILI sales
CHEVVU peon
PURUSHOTHAM clerk
DEEPU assistant
AKKI manager

awk '{sum += } END { print sum }' Text1.txt OUTPUT:

5500

awk '{sum += } END { print sum / NR }' Text1.txt OUTPUT:

550

awk '{ print substr(,2,4) }' Text1.txt OUTPUT:

OTA
ENKA
HARA
EJA
TUKU
AITH
HEVV
URUS
EEPU
KKI

awk '{ print }' Text1.txt OUTPUT:

manager
clerk
manager
sales
account
sales
peon
clerk
assistant
manager

awk '{ if (> 500) { print senior } else { print junior} }' Text1.txt OUTPUT:

junior
junior
junior
junior
junior
senior
senior
senior
senior

senior

awk 'function cube(x) { return x*x*x } {print cube() }' Text1.txt OUTPUT:

```
1000000
8000000
27000000
64000000
125000000
216000000
343000000
512000000
729000000
1000000000
```

sed.sh

```
#!/bin/bash
echo -e "sed 's/sales/accountant/' Text1.txt OUTPUT: \n";
sed 's/sales/accountant/' Text1.txt;
echo -e "\nsed 's/sales/accountant/g' Text1.txt OUTPUT: \n";
sed 's/sales/accountant/g' Text1.txt;
echo -e "\nsed '8s/sales/accountant/' Text1.txt OUTPUT: \n";
sed '8s/sales/accountant/' Text1.txt;
echo -e "\nsed '8s/sales/accountant/p' Text1.txt OUTPUT: \n";
sed '8s/sales/accountant/p' Text1.txt;
echo -e "\nsed -n '8s/sales/accountant/' Text1.txt OUTPUT: \n";
sed -n '8s/sales/accountant/p' Text1.txt;
echo -e "\nsed '5d' Text1.txt OUTPUT : \n";
sed '5d' Text1.txt;
echo -e "\nsed '$d' Text1.txt OUTPUT : \n";
sed '$d' Text1.txt;
echo -e "\nsed '3,7d' Text1.txt OUTPUT : \n";
```

```
sed '3,7d' Text1.txt;
echo -e "\nsed '3,$d' Text1.txt OUTPUT : \n";
sed '3,$d' Text1.txt;
echo -e "\nsed '/manager/d' Text1.txt OUTPUT : \n";
sed '/manager/d' Text1.txt;
```

OUTPUT:

sed 's/sales/accountant/' Text1.txt OUTPUT:

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 accountant
5 ATUKURI 500 22 account
6 MAITHILI 600 23 accountant
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 accountant
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager
```

sed 's/sales/accountant/g' Text1.txt OUTPUT:

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 accountant
5 ATUKURI 500 22 account
6 MAITHILI 600 23 accountant
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 accountant
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager
```

sed '8s/sales/accountant/' Text1.txt OUTPUT:

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 sales
5 ATUKURI 500 22 account
6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 accountant
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager
```

sed '8s/sales/accountant/p' Text1.txt OUTPUT:

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 sales
5 ATUKURI 500 22 account
6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 accountant
8 PURUSHOTHAM 800 25 accountant
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager
```

sed -n '8s/sales/accountant/' Text1.txt OUTPUT:

```
8 PURUSHOTHAM 800 25 accountant
```

sed '5d' Text1.txt OUTPUT :

```
1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
```

3 CHARAN 300 20 manager
4 TEJA 400 21 sales
6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 sales
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager

sed " Text1.txt OUTPUT :

1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
3 CHARAN 300 20 manager
4 TEJA 400 21 sales
5 ATUKURI 500 22 account
6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 sales
9 DEEPU 900 26 assistant

sed '3,7d' Text1.txt OUTPUT :

1 KOTA 100 18 manager
2 VENKATA 200 19 clerk
8 PURUSHOTHAM 800 25 sales
9 DEEPU 900 26 assistant
10 AKKI 1000 27 manager

sed '3,' Text1.txt OUTPUT :

1 KOTA 100 18 manager
2 VENKATA 200 19 clerk

sed '/manager/d' Text1.txt OUTPUT :

2 VENKATA 200 19 clerk
4 TEJA 400 21 sales
5 ATUKURI 500 22 account
6 MAITHILI 600 23 sales
7 CHEVVU 700 24 peon
8 PURUSHOTHAM 800 25 sales
9 DEEPU 900 26 assistant

tar.sh

```
#!/bin/bash
echo -e "tar cvf file.tar *.txt OUTPUT: \n";
tar cvf file.tar *.txt;
echo -e "\ntar xvf file.tar OUTPUT: \n";
tar xvf file.tar;
echo -e "\ntar cvzf file.tar.gz *.txt OUTPUT: \n";
tar cvzf file.tar.gz *.txt;
echo -e "\ntar -czf - file.tar | wc -c OUTPUT: \n";
tar -czf - file.tar | wc -c;
echo -e "\ntar -tvf file.tar OUTPUT: \n";
tar -tvf file.tar;
echo -e "\ntar tvf file.tar Text1.txt OUTPUT: \n";
tar tvf file.tar Text1.txt;
```

OUTPUT:

tar cvf file.tar *.txt OUTPUT:

awk.txt
sed.txt
tar.txt
Text1.txt

tar xvf file.tar OUTPUT:

awk.txt
sed.txt
tar.txt
Text1.txt

tar cvzf file.tar.gz *.txt OUTPUT:

awk.txt
sed.txt
tar.txt
Text1.txt

tar -czf - file.tar | wc -c OUTPUT:

852

tar -tvf file.tar OUTPUT:

-rw-rw-r-- student/student 1220 2024-02-28 15:24 awk.txt
-rw-rw-r-- student/student 2208 2024-02-28 16:02 sed.txt
-rw-rw-r-- student/student 49 2024-02-28 16:14 tar.txt
-rw-rw-r-- student/student 236 2024-02-28 15:30 Text1.txt

tar tvf file.tar Text1.txt OUTPUT:

-rw-rw-r-- student/student 236 2024-02-28 15:30 Text1.txt

cpio.sh

```
#!/bin/bash  
echo -e "cpio -ov < Text1.txt > archive OUTPUT: \n";  
cpio -ov < Text1.txt > archive;
```

```
echo -e "\ncpio -iv < archive OUTPUT: \n";  
cpio -iv < archive;
```

OUTPUT:

```
cpio -ov < Text1.txt > archive OUTPUT:
```

```
cpio: 1 KOTA 100 18 manager: Cannot stat: No such file or directory  
cpio: 2 VENKATA 200 19 clerk: Cannot stat: No such file or directory  
cpio: 3 CHARAN 300 20 manager: Cannot stat: No such file or directory  
cpio: 4 TEJA 400 21 sales: Cannot stat: No such file or directory  
cpio: 5 ATUKURI 500 22 account: Cannot stat: No such file or directory  
cpio: 6 MAITHILI 600 23 sales: Cannot stat: No such file or directory  
cpio: 7 CHEVVU 700 24 peon : Cannot stat: No such file or directory  
cpio: 8 PURUSHOTHAM 800 25 sales: Cannot stat: No such file or directory  
cpio: 9 DEEPU 900 26 assistant: Cannot stat: No such file or directory  
cpio: 10 AKKI 1000 27 manager: Cannot stat: No such file or directory  
1 block
```

```
cpio -iv < archive OUTPUT:
```

```
1 block
```