**Assignment – 6**

**Awk commands and scripts**

root@wpl10:~/Desktop/UNIX Practice# cat sample.txt

hi hello little

betty bought cake

newly ordered from

NewYork Naan Magaan

Alla Singam Puli

Siruthai Climax Arambam

1. Write AWK command to print the total number of lines

root@wpl10:~/Desktop/UNIX Practice# awk "{}END{print NR}" sample.txt

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2. Write AWK command to print the number of fields

root@wpl10:~/Desktop/UNIX Practice# awk "{}END{print NF}" sample.txt

3

3. Write AWK command to print the last field of last line

root@wpl10:~/Desktop/UNIX Practice# awk '{a=NF}END{print $a}' sample.txt

Arambam

4. Write AWK command to print the last field of each line

root@wpl10:~/Desktop/UNIX Practice# awk '{a=NF;print $a}' sample.txt

little

cake

from

Magaan

Puli

Arambam

5. Write AWK command to print the line that has atleast 2 fields

root@wpl10:~/Desktop/UNIX Practice# awk '{if(NF>=2) print $0}' sample.txt

hi hello little

betty bought cake

newly ordered from

NewYork Naan Magaan

Alla Singam Puli

Siruthai Climax Arambam

6. Write AWK command that contains UNIX

root@wpl10:~/Desktop/UNIX Practice# awk '{for(i=1;i<=NF;i++) if($i=="UNIX")print $0 }' sample.txt

hi hello little UNIX

betty bought cake UNIX

NewYork Naan Magaan UNIX

Siruthai Climax Arambam UNIX

7. Write an AWK command that prints the fields in the order of field4, field3, field2, field1

root@wpl10:~/Desktop/UNIX Practice# awk '{for(i=NF;i>0;i--) printf("%s ",$i); printf("\n"); }' sample.txt

UNIX little hello hi

UNIX cake bought betty

from ordered newly

UNIX Magaan Naan NewYork

Puli Singam Alla

UNIX Arambam Climax Siruthai

8. Write AWK command to print the lines from 2 to 4

root@wpl10:~/Desktop/UNIX Practice# awk '{if(NR>=2&&NR<=4)print $0}' sample.txt

betty bought cake UNIX

newly ordered from

NewYork Naan Magaan UNIX

9. Create the file named workers.txt with the following

First Name Last Name Rate Hours

George White 18.00 23

Mark Red 18.10 20

Mary Blue 10.89 25

Dan Black 12.00 0

Susan Green 18.00 40

Nora Brown 17.20 46

Bruce Purple 12.20 52

John Gray 11.00 39

Bob Gold 15.00 45

Steve Silver 14.67 25

a. Write awk command to print the first and last name who did not work in the last week

root@wpl10:~/Desktop/UNIX Practice# awk '{if($4==0) print $1,$2}' workers.txt

Dan Black

b. Write awk command to print the record of the employee whose rate is $15 or more

root@wpl10:~/Desktop/UNIX Practice# awk '{if($3>15) print $0}' workers.txt

First Name Last Name Rate Hours

George White 18.00 23

Mark Red 18.10 20

Susan Green 18.00 40

Nora Brown 17.20 46

c. Write awk command to print the record whose first name is Mary

root@wpl10:~/Desktop/UNIX Practice# awk '{if($1=="Mary") print $0}' workers.txt

Mary Blue 10.89 25

d. Write awk command to print the record of the employee whose rate between $1 and $18

root@wpl10:~/Desktop/UNIX Practice# awk '{if($3>1&&$3<18) print $0}' workers.txt

Mary Blue 10.89 25

Dan Black 12.00 0

Nora Brown 17.20 46

Bruce Purple 12.20 52

John Gray 11.00 39

Bob Gold 15.00 45

Steve Silver 14.67 25

10. Create a file sales.txt with the following contents

Month Sales

January 20

February 30

March 43

February 34

January 12

June 89

May 97

June 60

July 23

August 13

August 45

October 56

October 45

November 34

a. Write awk command to find total sales

root@wpl10:~/Desktop/UNIX Practice# awk 'BEGIN{sum=0}{if(NR>1)sum+=$2}END{print sum}' Sales.txt

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b. Write awk script to find the total sales in every month

root@wpl10:~/Desktop/UNIX Practice# cat>script

$1 !~/Month/{

sales[$1]+=$2

}

END{

printf("\nMonths:\t\tSales: ");

for(month in sales)

printf("\n%-10s\t%.2f",month,sales[month]);

}

^C

root@wpl10:~/Desktop/UNIX Practice# awk -f script Sales.txt

Months: Sales:

0.00

July 23.00

February 64.00

October 101.00

May 97.00

March 43.00

August 58.00

January 32.00

November 34.00

June 149.00

c. Write awk script to find the months with no sales

root@wpl10:~/Desktop/UNIX Practice# cat>noSale

$2 ~ /^$/{

sales[1]=$1;

}

END{

printf("\nMonths: ");

for(i in sales)

printf("\n%-10s",sales[i]);

}

^C

root@wpl10:~/Desktop/UNIX Practice# awk -f noSale Sales.txt

Months: