EXPT NO : 9 **REPORT**

DATE :28 / 04 / 2019

AIM : **To perform simple text processing using awk scripting**

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1. **Write a awk script that accepts date argument in the form of mm-dd-yy and displays it in the following format. The script should check the validity of the argument and in the case of error, display a suitable message.**
   Sample I/P : 12-10-2008
   O/P : The day is 10 The month is Oct The year is 2008

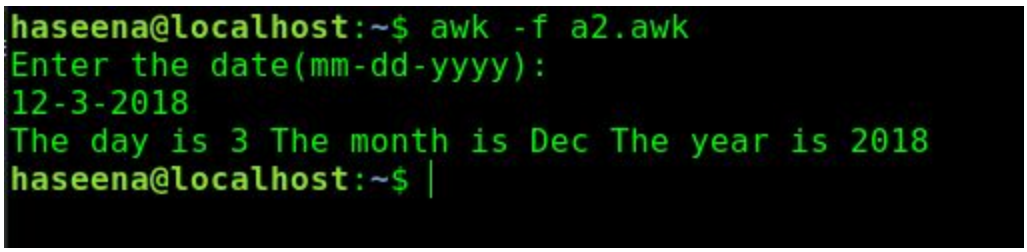
Program :

```
#!/usr/bin/awk -f

BEGIN{
FS="-";
print "Enter the date(mm-dd-yyyy): ";
getline < "/dev/tty";
f=0;
if($3%400==0){leap=1;}
else if($3%100==0 && $3%4==0){leap=0;}
else if($3%4==0){leap=1;}
else{leap=0;}
if( NF!=3 || $1<1 || $2<1 || $3<1 || $1>12 ||
($1==2&&((leap==0 && $2>28) || (leap==1 && $2>29))) ||
(($1==1||$1==3||$1==5||$1==7||$1==8||$1==10||$1==12)&&($2>31)) ||
(($1==4||$1==6||$1==9||$1==11)&&($2>30)))
{f=1;}
if(f==1)
print "Invalid Date Format";
else{
switch($1){
case 1: mon="Jan"
break;
case 2: mon="Feb"
break;
case 3: mon="Mar"
break;
case 4: mon="Apr"
```

```
break;
case 5: mon="May"
break;
case 6: mon="Jun"
break;
case 7: mon="Jul"
break;
case 8: mon="Aug"
break;
case 9: mon="Sep"
break;
case 10: mon="Oct"
break;
case 11: mon="Nov"
break;
default: mon="Dec"
}
print "The day is " $2 " The month is " mon " The year is " $3;
}
}
```

Output :



2 . Write an awk script to delete duplicate line from a text file. The order of the original lines must remain unchanged .

Program :

```
#!/usr/bin/awk -f
{
if(!seen[$0]++){
print $0 >> "temp";
}
}
END{
system("cat temp >" ARGV[1]);
```

```
system("rm temp");
system("cat " ARGV[1]);
}
```

Output :

```
haseena@localhost:~$ cat txt
hello
where are you
hello there
what a surpraise
what a surpraise
hi how are you
hello
hello
end
haseena@localhost:~$ awk -f a2.awk txt
hello
where are you
hello there
what a surpraise
hi how are you
end
haseena@localhost:~$
```

3 . Write an awk script to find out total number of books sold in each discipline as well as total book sold based on the given table

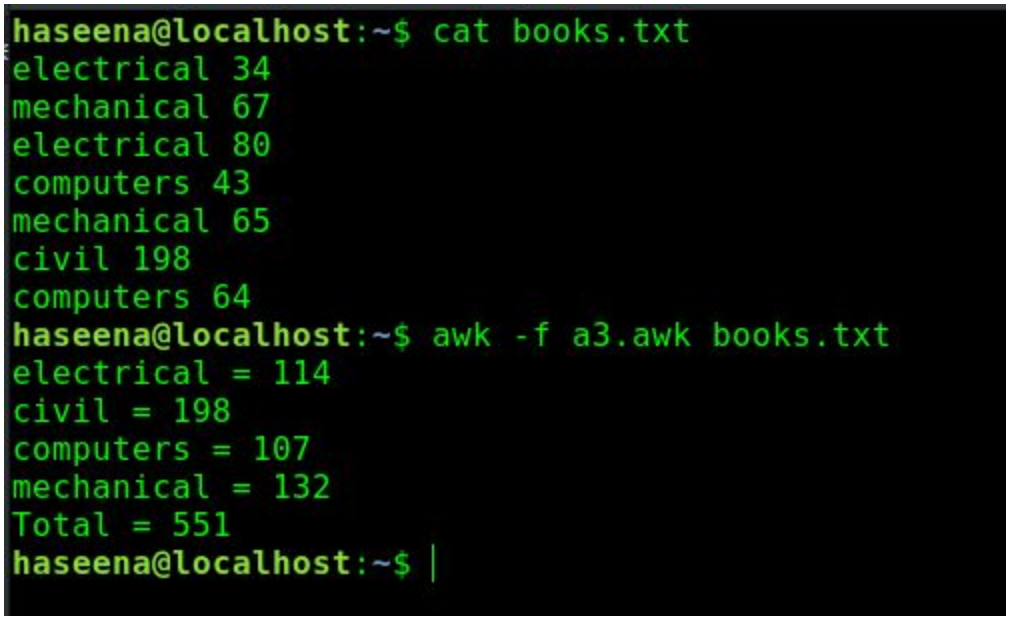
electrical 34
mechanical 67
electrical 80
computers 43
mechanical 65
civil 198
computers 64

Program :

```
#!/usr/bin/awk -f
{
arr[$1]+=$2;
total+=$2;
}
```

```
END{
for (i in arr){
print i " = " arr[i];
}
print "Total = " total
}
```

Output :



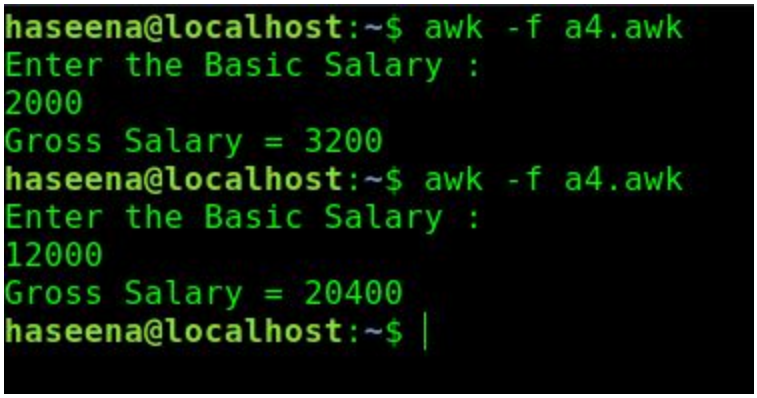
4 . Write an awk script to compute gross salary of an employee accordingly to rule given below : If basic salary < 10000 then DA = 45% of the basic and HRA =15% of basic. If basic salary >= 10000 then DA =50% of the basic and HRA =20% of basic.

Program :

```
#!/usr/bin/awk -f
BEGIN{
print "Enter the Basic Salary :";
getline < "/dev/tty";
if($0<10000){
da=45/100*$0;
hra=15/100*$0;
}
else{
da=50/100*$0;
hra=20/100*$0;
```

```
}
gsal=$0+da+hra;
print "Gross Salary = " gsal
}
```

Output :



CONCLUSION

Verified outputs for the above awk script questions and familiarized with simple text processing using awk .