Ex. No.: 4a)
Date: 13.02.2025

EMPLOYEE AVERAGE PAY

Aim:

To find out the average pay of all employees whose salary is more than 6000 and no. of days worked is more than 4.

Program:

Create the emp.dat file:

JOE 40000 5
BEN 49000 6
AMY 39000 4

Create the emp.awk script:

```
BEGIN {
  totalPay = 0
  count = 0
}
{
  if ($2 > 6000 && $3 > 4) {
    print $1, "earned", $2 * $3
    totalPay += $2 * $3
    count++
  }
}
END {
  if (count > 0) {
    print "Number of employees satisfying criteria:", count
    print "Total pay:", totalPay
    print "Average pay:", totalPay / count
  } else {
    print "No employees satisfy the criteria."
  }
}
```

Output:

```
$ awk -f emp.awk emp.dat
JOE earned 200000
BEN earned 294000
Number of employees satisfying criteria: 2
Total pay: 494000
Average pay: 247000
```

Result:

Hence, the Shell script to calculate the average pay of employees was executed successfully, and the average pay was calculated correctly.

Ex. No.: 4b)
Date: 13.02.2025

RESULTS OF EXAMINATION

Aim:

To print the pass/fail status of a student in a class

Program:

Create the marks.dat file (student marks data):

```
BEN 40 55 66 77 55 77
TOM 60 67 84 92 90 60
RAM 90 95 84 87 56 70
JIM 60 70 65 78 90 87
```

Create the marks.awk script:

```
BEGIN {
 print "NAME SUB-1 SUB-2 SUB-3 SUB-4 SUB-5 SUB-6 STATUS"
 print "_____"
}
{
 status = "PASS"
 for (i = 2; i <= 7; i++) {
  if ($i < 45) {
   status = "FAIL"
   break
  }
 }
 print $1, $2, $3, $4, $5, $6, $7, status
}
```

Output:

```
$ gawk -f marks.awk marks.dat
NAME SUB-1 SUB-2 SUB-3 SUB-4 SUB-5 SUB-6 STATUS
_____
BEN 40 55 66 77 55 77 FAIL
TOM 60 67 84 92 90 60 PASS
RAM 90 95 84 87 56 70 PASS
JIM 60 70 65 78 90 87 PASS
_____
```

Result:

The Shell script to determine the pass/fail status based on the subject marks was executed successfully.