**Ex. No.: 3 a**

**Date: 05.03.2024**

## 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.

**Algorithm:**

1. Create a flat file emp.dat for employees with their name, salary per day and number of days worked and save it.
2. Create an awk script emp.awk
3. For each employee record do
   a. If Salary is greater than 6000 and number of days worked is more than 4then print name and salary earned
   b. Compute total pay of employee
4. Print the total number of employees satisfying the criteria and their average

pay.

**Program Code:**

Emp.dat

```
John 1000 7
Jane 1100 5
Doe 7000 8
Smith 5000 6
Alice 6500 10
Bob 600 3
```

Emp.awk

```
BEGIN {
    total_pay = 0;
    count = 0;
}

{
    name = $1;
    salary_per_day = $2;
    days_worked = $3;
```

```
        salary_earned = salary_per_day * days_worked;

        if(salary_earned > 6000 && days_worked > 4) {
                print name, salary_earned;
                total_pay += salary_earned;
                count++;
        }
}
END {
        if(count > 0){
                average_pay = total_pay / count;
                print "Total no of emp satisfying the criteria: ", count;
                print "Average pay of employees: ", average_pay;
        }else{
                print "No employees satisfy the criteria";
        }
}
```

**Output:**

```
┌──(kali㉿kali)-[~/os/ex3a]
└─$ awk -f emp.awk emp.dat
John 7000
Doe 56000
Smith 30000
Alice 65000
Total no of emp satisfying the criteria:  4
Average pay of employees:  39500
```

**Result:**

The above program executed successfully and output got verified.

**Ex. No.: 3 b**
**Date: 09.03.2024**

**Aim:**

RESULTS OF EXAMINATION

**Program Code:**
Student.dat

```
John 50 45 65 70
Jane 55 60 40 75
Doe 45 35 55 60
Smith 70 80 90 85
Alice 50 60 70 80
Bob 30 40 45 50
```

Ex3b.awk

```
{
        name = $1;
        subjects_failed = 0;

        for(i = 2; i <= NF; i++){
                if($i < 45){
                        subjects_failed++;
                }
        }

        if(subjects_failed > 0) {
                print name, "Fail";
        }else{
                print name, "Pass";
        }
}
```

**OUTPUT**

```
┌──(kali㉿kali)-[~/os/ex3b]
└─$ awk -f ex3b.awk student.dat
John Pass
Jane Fail
Doe Fail
Smith Pass
Alice Pass
Bob Fail
```

**Result:**
The above program executed successfully and output got verified.