

Ex. No.: 4a)

Date: 12.2.25

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 4, then 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:

```
Begin { print "Employee Details" } {  
    if ($2 > 6000 && $3 > 4) {  
        print $1, "It It", $2 * $3  
        pay = pay + $2 * $3  
        count = count + 1 }  
}
```

```
END { {
```

```
    print "no of employees are =", count  
    print "total pay = " , pay  
    print "average pay = " , pay / count } }
```

Sample Input:

//emp.dat – Col1 is name, Col2 is Salary Per Day and Col3 is //no. of days worked

```
JOE 8000 5
RAM 6000 5
TIM 5000 6
BEN 7000 7
AMY 6500 6
```

Output:

Run the program using the below commands

```
[student@localhost ~]$ vi emp.dat
[student@localhost ~]$ vi emp.awk
[student@localhost ~]$ gawk -f emp.awk emp.dat.
```

EMPLOYEES DETAILS

```
JOE 40000
BEN 49000
AMY 39000
no of employees are= 3
total pay= 128000
average pay= 42666.7
[student@localhost ~]$
```

\$ vi emp.dat

\$ vi emp.awk

\$ gawk -f emp.awk emp.dat

EMPLOYEE DETAILS

```
JOE 40000
BEN 49000
AMY 39000
no of employees are=3
total pay= 28000
average pay= 42666.7
```

Result:

Thus the ~~awk~~ script to find out the average pay of all ~~the~~ employees whose salary is more than 6000 and no of days ~~it~~ is worked than 4 has be successfully executed.

Ex. No.: 4b)

Date: 13.2.25

RESULTS OF EXAMINATION

Aim:

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

Algorithm:

1. Read the data from file
2. Get a data from each column
3. Compare the all subject marks column
 - a. If marks less than 45 then print Fail
 - b. else print Pass

Program Code:

//marks.awk

```
Begin {print "Name ", "1t", "SUB-1", "1t", "SUB-2",  
"1t", "SUB-3", "1t", "SUB-4", "1t", "SUB5", "1t",  
"SUB-6", "1t", "STATUS"  
print "-----\n"}  
if ( $2 < 45 || $3 < 45 || $4 < 45 || $5 < 45 ||  
$6 < 45 || $7 < 45 )  
{  
print $1, "1t", $2, "1t", $3, "1t", $4, "1t", $5, "1t",  
$6, "1t", $7, "1t", "FAIL"}  
else {  
print $1, "1t", $2, "1t", $3, "1t", $4, "1t", $5, "1t",  
$6, "1t", $7, "1t", "PASS"}  
END  
print "-----\n"}
```

Input:

//marks.dat

//Col1- name, Col 2 to Col7 – marks in various subjects

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

Output:

Run the program using the below command

[root@localhost student]# 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

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	51	70	PASS
JIM	60	70	65	78	90	87	PASS

Result:

Thus the ~~awk~~ script to print the pass / fail status of a ~~student~~ in a class has been successfully executed.