

Ex. No.: 4b)

Date: 13/02/25

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", "\t", "SUB-1", "\t", "SUB-2", "\t", "SUB-3",  
    "\t", "SUB-4", "\t", "SUB-5", "\t", "SUB-6", "\t",  
    "STATUS"  
  
    print "-----\n"  
  
    {  
        if ($2 < 45 || $3 < 45 || $4 < 45 || $5 < 45 || $6 < 45 || $7 < 45)  
        {  
            print $1, "\t", $2, "\t", $3, "\t", $4, "\t", $5, "\t",  
            $6, "\t", $7, "\t", "FAIL"  
        }  
        else {  
            print $1, "\t", $2, "\t", $3, "\t", $4, "\t", $5,  
            "\t", $6, "\t", $7, "\t", "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	56	70	PASS
JIM	60	70	65	78	90	87	PASS

Result:

Thus the awk script to print the pass/fail status of students has been executed successfully and returns the expected output.