

Ex. No.: 4(b)

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RESULTS OF EXAMINATION

Aim:

To print the pass/fail status of a student in a class based on subject marks.

Algorithm:

1. Read student data from the input file marks.dat.
2. For each record, retrieve the name and six subject marks.
3. Check each mark:
 - If any subject mark is less than 45, then the student is marked as **FAIL**.
 - Otherwise, the student is marked as **PASS**.
4. Print the student name, all marks, and the pass/fail status.

Program Code:

marks.dat – Input File

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 **marks.awk – AWK Script** BEGIN {

print "NAME SUB-1 SUB-2 SUB-3 SUB-4 SUB-5 SUB-6 STATUS" print

" _____ " }

{

name = \$1 status

= "PASS"

for (i = 2; i <= 7; i++) {

if (\$i < 45)

status = "FAIL"

}

```
printf "%s %3d %5d %5d %5d %5d %5d %6s\n", name, $2, $3, $4, $5, $6, $7, status  
}
```

Sample Input and Output:

```
[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
```

Result:

The AWK script was executed successfully. The script correctly identified and displayed the

pass/fail status of each student based on their subject marks.