Ex No: 4 (b) RESULTSOF EXAMINATION

Date: 08.02.2025

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.