# Ex No: 4 (b) Roll no:231901002

**Date: 08.02.2025**

# 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++) {

CS23431-OPERATING SYSTEMS R o l l N o : 2 3 1 9 0 1 0 3 3

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.