

4a) To find out the average pay of all employees whose salary is more than 6000 and no. of days worked is more than 4.

Program code:

```
BEGIN {
    total = 0;
    count = 0;
}

$2 > 6000 && $3 > 4 {
    total += $2;
    count++;
}

END {
    if (count > 0)
        print "Average pay of selected employees: " total / count;
    else
        print "No employee met the criteria.";
}
```

Input:

```
John 6500 5
Alice 7200 6
Bob 5800 7
David 8000 4
Eve 9000 10
```

Output:

```
haresh@haresh:~$ gawk -f emp.awk emp.dat
Average pay of selected employees: 7566.67
```

4b)

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

Program code:

```
BEGIN {  
    print "NAME SUB-1 SUB-2 SUB-3 SUB-4 SUB-5 SUB-6 STATUS"  
    print "_____"  
}  
  
{  
    status = "PASS"  
    for (i = 2; i <= 7; i++) {  
        if ($i < 45) {  
            status = "FAIL"  
            break  
        }  
    }  
    print $1, $2, $3, $4, $5, $6, $7, status  
}
```

Output

```
NAME SUB-1 SUB-2 SUB-3 SUB-4 SUB-5 SUB-6 STATUS  
# marks.dat      FAIL  
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  
      FAIL
```