QUESTION 3 ANSWERS

```
coder@dce7ae72477b:~$ vi marks.txt
coder@dce7ae72477b:~$ vi validate_results.sh
coder@dce7ae72477b:~$ chmod +x validate_results.sh
coder@dce7ae72477b:~$ ./validate_results.sh
Passed all subjects: 101 Amit
Failed in exactly one subject: 102 Riya
Passed all subjects: 103 Kunal
Failed in exactly one subject: 104 Neha
Passed all subjects: 105 Rahul

_____________________________
Total students passed all: 3
Total students failed one subject: 2
coder@dce7ae72477b:~$
```

```
101,Amit,45,67,80
102,Riya,30,70,60
103,Kunal,90,88,92
104,Neha,40,20,60
105,Rahul,33,33,33
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"marks.txt" 5L, 92C                                    5,18          All
```

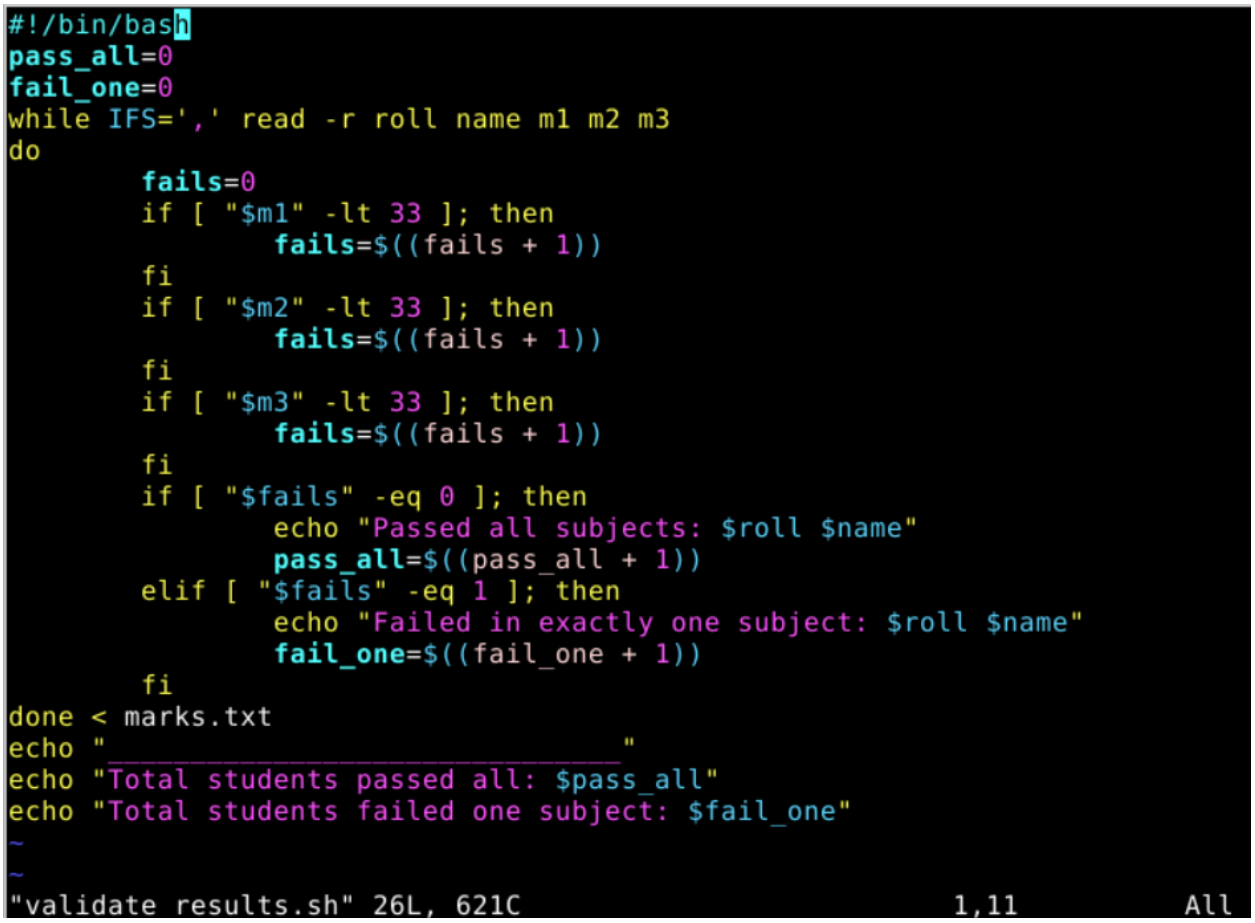

```
#!/bin/bash
pass_all=0
fail_one=0
while IFS=',' read -r roll name m1 m2 m3
do
        fails=0
        if [ "$m1" -lt 33 ]; then
                fails=$((fails + 1))
        fi
        if [ "$m2" -lt 33 ]; then
                fails=$((fails + 1))
        fi
        if [ "$m3" -lt 33 ]; then
                fails=$((fails + 1))
        fi
        if [ "$fails" -eq 0 ]; then
                echo "Passed all subjects: $roll $name"
                pass_all=$((pass_all + 1))
        elif [ "$fails" -eq 1 ]; then
                echo "Failed in exactly one subject: $roll $name"
                fail_one=$((fail_one + 1))
        fi
done < marks.txt
echo "_____________________________"
echo "Total students passed all: $pass_all"
echo "Total students failed one subject: $fail_one"
~
~
"validate_results.sh" 26L, 621C                          1,11          All
```

I created a shell script to read student records from `marks.txt` and evaluate results based on passing marks of 33. The script uses loops and arithmetic comparisons to identify students who failed in exactly one subject and those who passed all subjects. It also prints the count of students in each category.