

Ganpat University

Faculty of Engineering & Technology

Computer Science & Engineerin0067

Name:- Dwij Vatsal Desai

Sem:- 2

Sub: - BOSS

Enrollment No.:- 23162121027

Prac:- 14

Practical 14

Write shell script to manage(add/view/update) Marks database with following fields:

RollNumber,StudentName,LA,BOSS,BCS

1. List all the details of all students.
2. Add a new student with following details:

RollNumber: last 4 digits of your roll number

StudentName: yourname

LA: Marks in LA subject

BOSS: Marks in BOSS subject

BCS: Marks in BCS subject

3. Update all 70 marks to a new value 81.

Image:-

```
#!/bin/bash

DATABASE="marks_database.txt"

# Function to list all students
list_students() {
    if [[ ! -f $DATABASE ]]; then
        echo "No database found."
    else
        echo "RollNumber | StudentName | LA | BOSS | BCS"
        echo "-----"
        cat $DATABASE
    fi
}

# Function to add a new student
add_student() {
    read -p "Enter Roll Number: " rollnumber
    read -p "Enter Student Name: " studentname
    read -p "Enter LA Marks: " la_marks
    read -p "Enter BOSS Marks: " boss_marks
    read -p "Enter BCS Marks: " bcs_marks

    echo "$rollnumber | $studentname | $la_marks | $boss_marks | $bcs_marks" >> $DATABASE
    echo "Student added successfully."
}

# Function to update all 70 marks to 81
update_marks() {
    if [[ ! -f $DATABASE ]]; then
        echo "No database found."
    else
        temp_file=$(mktemp)
        while IFS=' | ' read -r rollnumber studentname la_marks boss_marks bcs_marks; do
            [[ $la_marks -eq 70 ]] && la_marks=81
            [[ $boss_marks -eq 70 ]] && boss_marks=81
            [[ $bcs_marks -eq 70 ]] && bcs_marks=81
            echo "$rollnumber | $studentname | $la_marks | $boss_marks | $bcs_marks" >> $temp_file
        done < $DATABASE
        mv $temp_file $DATABASE
        echo "Marks updated successfully."
    fi
}

# Main script logic
echo "Marks Database Management"
echo "1. List all students"
echo "2. Add a new student"
echo "3. Update all 70 marks to 81"
echo "4. Exit"
read -p "Enter your choice: " choice

case $choice in
    1)
        list_students
        ;;
    2)
        add_student
        ;;
    3)
        update_marks
        ;;
    4)
        echo "Exiting..."
        ;;
    *)
        echo "Invalid choice. Exiting..."
        ;;
esac
```

Output:-

```
[ddesai@localhost ~]$ touch marks_manager.sh
[ddesai@localhost ~]$ vi marks_manager.sh
[ddesai@localhost ~]$ chmod +x marks_manager.sh
[ddesai@localhost ~]$ ./marks_manager.sh
Marks Database Management
1. List all students
2. Add a new student
3. Update all 70 marks to 81
4. Exit
Enter your choice: 1
No database found.
[ddesai@localhost ~]$ ./marks_manager.sh
Marks Database Management
1. List all students
2. Add a new student
3. Update all 70 marks to 81
4. Exit
Enter your choice: 2
Enter Roll Number: 23
Enter Student Name: dwij_deasi
Enter LA Marks: 24
Enter BOSS Marks: 12
Enter BCS Marks: 26
Student added successfully.
[ddesai@localhost ~]$ 1
bash: 1: command not found...
[ddesai@localhost ~]$ ./marks_manager.sh
Marks Database Management
1. List all students
2. Add a new student
3. Update all 70 marks to 81
4. Exit
Enter your choice: 1
```

```
bash: 1: command not found...
[ddesai@localhost ~]$ ./marks_manager.sh
Marks Database Management
1. List all students
2. Add a new student
3. Update all 70 marks to 81
4. Exit
Enter your choice: 1
RollNumber | StudentName | LA | BOSS | BCS
-----
23 | dwij_deasi | 24 | 12 | 26
[ddesai@localhost ~]$
```