Program

```
function recedit(){
        file="s4cs1.txt"
        if [[ "$#" -lt 2 ]]
        then
                echo "Error: Insufficient arguments."
                exit 1
        fi
        op=$1
        ID=$2

        student_exists(){
                grep -q "^$ID," "$file"
        }

        case "$op" in
                add)
                if student_exists
                then
                        echo "Error: Student with Admission no already exists"
                else
                        read -p "Enter name" name
                        read -p "Enter address" address
                        read -p "Enter phone no" phone
                        read -p "Enter email" email
                        echo "$ID, $name, $address, $phone, $email" >> "$file"
                        echo "Student added successfully"
                fi
                ;;
                search)
                if student_exists
                then
                        grep "^$ID," "$file"
                else
                        echo "Error: Student with Admission no not found"
                fi
                ;;
                update)
                if student_exists
                then
                        read -p "Enter updated name" name
                        read -p "Enter updated address" address
                        read -p "Enter updated phone number" phone
                        read -p "Enter updated email" email
                        sed -i "/^$ID,/c\\$ID,$name,$address,$phone,$email" "$file"
```

```bash
                        echo "Student record updated successfully"
                else
                        echo Error: Student with Admission number not found
                fi
                ;;
                delete)
                if student_exists
                then
                        sed -i "/^$ID,/d" "$file"
                        echo "Student record deleted successfully"
                else
                        echo "Error. Student with Admission number $ID not found"
                fi
                ;;
                *)
                echo "Error: Invalid operation"
                ;;
        esac
}
```

1 Sample run of the program

```
s23a40@Server-2:~/blab$ bash exp8.sh
s23a40@Server-2:~/blab$ recedit add 1
Enter nameKiran
Enter addressCET
Enter phone no8754776980
Enter emailkiran@gmail.com
Student added successfully
s23a40@Server-2:~/blab$ recedit search 1
1, Kiran, CET, 8754776980, kiran@gmail.com
s23a40@Server-2:~/blab$ recedit delete a
Error. Student with Admission number a not found
s23a40@Server-2:~/blab$ recedit update 1
Enter updated nameKiran Jayasankar
Enter updated address::College of Engineering Trivandrum
Enter updated phone number8754776980
Enter updated emailkiranjayasankar@gmail.com
Student record updated successfully
s23a40@Server-2:~/blab$ recedit search 1
1,Kiran Jayasankar,::College of Engineering Trivandrum,8754776980,kiranjayasankar@gmail.com
s23a40@Server-2:~/blab$ ▮
```