```bash
#!/bin/bash

FILE="address_book.txt"
create_address_book(){
     touch "$FILE"
     echo "Address Book created successfully!"
}

view_address_book() {
    if [ -s "$FILE" ]; then
        echo "Address Book Contents:"
        cat -n "$FILE"
    else
        echo "Address book is empty."
    fi
}

insert_record() {
    echo "Enter Name:"
    read name
    echo "Enter Phone Number:"
    read phone
    echo "Enter Email Address:"
    read email

    echo "$name | $phone | $email" >> "$FILE"
    echo "record inserted successfully"
}

delete_record() {
    echo "Enter the Name of the contact to delete:"
    read name

    if grep -q "^$name" "$FILE"; then
        grep -v "^$name" "$FILE" > temp.txt
        mv temp.txt "$FILE"
        echo "Record is deleted."
    else
        echo "Record not found."
    fi
}
modify_record() {
    echo "Enter the Name of the contact to modify:"
    read name

    if grep -q "^$name" "$FILE"; then
        grep -v "^$name" "$FILE" > temp.txt
        echo "Enter new Name:"
        read new_name
        echo "Enter new Phone Number:"
        read new_phone
        echo "Enter new Email Address:"
        read new_email
        echo "$new_name | $new_phone | $new_email" >> temp.txt
```

```
            mv temp.txt "$FILE"
            echo "Record updated."
        else
            echo "Record not found."
        fi
}

# Main menu loop
while true; do
    echo ""
    echo "====== Address Book Menu ======"
    echo "1) Create Address Book"
    echo "2) View Address Book"
    echo "3) Insert a Record"
    echo "4) Delete a Record"
    echo "5) Modify a Record"
    echo "0) Exit"
    echo "Choose an option (0-5):"
    read choice

    case "$choice" in
        1) create_address_book ;;
        2) view_address_book ;;
        3) insert_record ;;
        4) delete_record ;;
        5) modify_record ;;
        0) echo "Exiting program."; break ;;
        *) echo "Invalid option. Please choose 1, 2, 3, 4, 5, or 0." ;;
    esac
done
```

                              OUTPUT


```
====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
1
Address Book created successfully!

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
3
Enter Name:
```

Amar
Enter Phone Number:
7020649661
Enter Email Address:
amar@gmail.com
record inserted successfully

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
3
Enter Name:
Prasad
Enter Phone Number:
8888231496
Enter Email Address:
prasad@gmail.com
record inserted successfully

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
3
Enter Name:
Shubham
Enter Phone Number:
7014235841
Enter Email Address:
shubh@gmail.com
record inserted successfully

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
3
Enter Name:
Aaditya
Enter Phone Number:
9963251471
Enter Email Address:
ar@gmail.com

record inserted successfully

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
2
Address Book Contents:
    1   Amar | 7020649661 | amar@gmail.com
    2   Prasad | 8888231496 | prasad@gmail.com
    3   Shubham | 7014235841 | shubh@gmail.com
    4   Aaditya | 9963251471 | ar@gmail.com

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
4
Enter the Name of the contact to delete:
Aaditya
Record is deleted.

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
2
Address Book Contents:
    1   Amar | 7020649661 | amar@gmail.com
    2   Prasad | 8888231496 | prasad@gmail.com
    3   Shubham | 7014235841 | shubh@gmail.com

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
5
Enter the Name of the contact to modify:
Shubham
Enter new Name:

```
Gill
Enter new Phone Number:
9403251421
Enter new Email Address:
gill@gmail.com
Record updated.

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
2
Address Book Contents:
     1     Amar | 7020649661 | amar@gmail.com
     2     Prasad | 8888231496 | prasad@gmail.com
     3     Gill | 9403251421 | gill@gmail.com

====== Address Book Menu ======
1) Create Address Book
2) View Address Book
3) Insert a Record
4) Delete a Record
5) Modify a Record
0) Exit
Choose an option (0-5):
0
Exiting program.
```