```
********************
Welcome User!
This is AIT'S Address Book Application!
--------------------

Do You want to login as admin?(Y/N) : n
logged in as user!!
Please enter your FILE NAME ('.txt' file extension will be added): save
'save.txt' has been read. 4 records have been added to the database.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
2
--------------------
Print Record(s) with the same phone number
Please enter the contact's TELEPHONE NUMBER: 6377868494
--------------------
No records of 6377868494 found.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
1
--------------------
Print Record(s) with the same name
Please enter the person's NAME: sachin
--------------------
====================
Record #1 of:
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
1 records of sachin printed.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
```

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```
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
2
--------------------
Print Record(s) with the same phone number
Please enter the contact's TELEPHONE NUMBER: 3
--------------------
No records of 3 found.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
3
--------------------
Printing Records...
--------------------
====================
Record #1
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
====================
Record #2
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
====================
Record #3
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
====================
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
4 Records printed.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
```

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```
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
3
--------------------
Printing Records...
--------------------
====================
Record #1
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
====================
Record #2
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
====================
Record #3
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
====================
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
4 Records printed.
--------------------
Usage:
        1: Print information about a record using the name as the key.
        2: Print information about a record using the phone number as the key.
        3: Print all information in the database.
        4: Quit the program.
What would you like to do?
4
4 records have been recorded to file: save.txt
--------------------
0 records removed from the memory.
--------------------
--------------------
Application terminated
********************

Process returned 0 (0x0)   execution time : 217.201 s
Press ENTER to continue.
```

```
********************
Welcome User!
This is AIT'S Address Book Application!
--------------------

Do You want to login as admin?(Y/N) : y
Enter username : sachin
Enter Password : sachin
Welcome sachin, logged in as admin!!
Please enter your FILE NAME ('.txt' file extension will be added): save
'save.txt' has been read. 4 records have been added to the database.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
6
--------------------
Printing Records...
--------------------
====================
Record #1
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
====================
Record #2
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
====================
Record #3
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
====================
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
4 Records printed.
--------------------
```

```
********************
Welcome User!
This is AIT'S Address Book Application!
--------------------

Do You want to login as admin?(Y/N) : y
Enter username : sachin
Enter Password : sachin
Welcome sachin, logged in as admin!!
Please enter your FILE NAME ('.txt' file extension will be added): save
'save.txt' has been read. 4 records have been added to the database.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
1
--------------------
Add a new Record
Please enter the person's NAME: rahul
Please enter the person's ADDRESS (Enter '$' when you're finished):
jaipur
rajasthan
india $
Please enter the person's BIRTH YEAR: 451990

Please enter the contact's TELEPHONE NUMBER: 4569871259
--------------------
Record has been added.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
6
--------------------
Printing Records...
--------------------
====================
Record #1
```

```
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
====================
Record #5
Name: rahul
Address: jaipur
rajasthan
india
Year of Birth: 451990
Telephone Number: 4569871259
5 Records printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
2
--------------------
Print Record(s) with the name
Please enter the person's NAME: rahul
--------------------
====================
Record #1 of:
Name: rahul
Address: jaipur
rajasthan
india
Year of Birth: 451990
Telephone Number: 4569871259
1 records of rahul printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
```

```
        10: Quit the program.
What would you like to do?
2
--------------------
Print Record(s) with the name
Please enter the person's NAME: rahul
--------------------
====================
Record #1 of:
Name: rahul
Address: jaipur
rajasthan
india
Year of Birth: 451990
Telephone Number: 4569871259
1 records of rahul printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
3
--------------------
Print Record(s) with the same phone number
Please enter the contact's TELEPHONE NUMBER: 63258964
--------------------
====================
Record #1 of:
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
1 records of 63258964 printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
```

```
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
3
--------------------
Print Record(s) with the same phone number
Please enter the contact's TELEPHONE NUMBER: 63258964
--------------------
====================
Record #1 of:
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
1 records of 63258964 printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
4
--------------------
Modify Record(s) with the same name
Please enter the person's NAME: rahul
Please enter the person's ADDRESS (Enter '$' when you're finished):
ajmer
rajasthan $

Please enter the contact's TELEPHONE NUMBER: 45879653
--------------------
1 records of rahul records_modified.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
```

```
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
6
--------------------
Printing Records...
--------------------
====================
Record #1
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
====================
Record #2
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
====================
Record #3
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
====================
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
====================
Record #5
Name: rahul
Address: ajmer
rajasthan
Year of Birth: 451990
Telephone Number: 45879653
5 Records printed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
```

```
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
7
--------------------
Delete Record(s) with the same name
Please enter the person's NAME: rahul
--------------------
1 records of rahul records_deleted.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
6
--------------------
Printing Records...
--------------------
===================
Record #1
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
===================
Record #2
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
===================
Record #3
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
===================
Record #4
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
4 Records printed.
--------------------
Usage:
        1: Add a new record into the database.
```

```
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
9
--------------------
Reversing the order of all the Records...
--------------------
All Records have been reversed.
--------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
6
--------------------
Printing Records...
--------------------
===================
Record #1
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
===================
Record #2
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
===================
Record #3
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
===================
Record #4
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
4 Records printed.
--------------------
Usage:
        1: Add a new record into the database.
```

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```
-------------------
Printing Records...
-------------------
===================
Record #1
Name: sachin
Address: sdfghjkl
Year of Birth: 6112000
Telephone Number: 63258964
===================
Record #2
Name: sachin23
Address: 45 sachin jaipur
Year of Birth: 61112000
Telephone Number: 637728684
===================
Record #3
Name: sach
Address: in jaipur
Year of Birth: 61000
Telephone Number: 678684
===================
Record #4
Name: dsa
Address: lkjfds
nhuio
kjg
Year of Birth: 458796
Telephone Number: 587412369
4 Records printed.
-------------------
Usage:
        1: Add a new record into the database.
        2: Print information about a record using the name as the key.
        3: Print information about a record using the phone number as the key.
        4: Modify a record in the database using the name as the key.
        5: Modify a record in the database using the phone number as the key.
        6: Print all information in the database.
        7: Delete an existing record from the database using name as the key.
        8: Delete an existing record from the database using phone nymber as the key.
        9: Reverse the order of all existing records from the database.
        10: Quit the program.
What would you like to do?
10
4 records have been recorded to file: save.txt
-------------------
0 records removed from the memory.
-------------------
Application terminated
*******************

Process returned 0 (0x0)   execution time : 194.159 s
Press ENTER to continue.
```