

## Manual

IDE: Visual Studio 2017 Community in C++

### 0. Menu

```

Main Menu
=====
[1]      Add a new contact
[2]      List all contacts
[3]      Search for contact
[4]      Edit a contact
[5]      Delete a contact
[6]      Import from file
[7]      Export to file
[8]      Sorting

[0]      Exit
=====
Enter the choice:2
  
```

### 1. Add a new contact

(Enter the amount first)

```

Enter the choice:1

Usage of Create : Name Phone Address Email
Example:Amy 0912345678 Taiwan amy@example.com.tw
-----
How many users do you want to create:1
Please input new user information:Sean 0987654321 TaiwanTech sean@gmail.com
Created an user successfully!
  
```

### 2. List all contacts

(I provide the sorting method)

```

Enter the choice:2

This is sorting by insertion method.

#      Name      Phone      Address      Email
-----
1      Sean      0987654321      TaiwanTech      sean@gmail.com
-----
There are 1 contacts in your list.
  
```

## 3. Search for contact (no matter uppercase or lowercase)

```
Enter the choice:3

Usage of Search : Name or Phone
Example:Amy or 0912345678
Please input user information:sean

Here is the user information:

Name      Phone      Address      Email
-----
Sean      0987654321      TaiwanTech      sean@gmail.com
-----
```

(Also provide searching by phone)

```
Enter the choice:3

Usage of Search : Name or Phone
Example:Amy or 0912345678
Please input user information:0987654321

Here is the user information:

Name      Phone      Address      Email
-----
Sean      0987654321      TaiwanTech      sean@gmail.com
-----
```

(Show the message if not found)

```
Enter the choice:3

Usage of Search : Name or Phone
Example:Amy or 0912345678
Please input user information:sean2

There is no existed user with that name or phone number.
```

## 4. Edit a contact

(Name must be the same)

```
Enter the choice:4

Usage of Modify : Name or Phone
Example:Amy or 0912345678
Please input user information:sean

Here is the user information:

Name      Phone      Address      Email
-----
Sean      0987654321      TaiwanTech      sean@gmail.com
-----

Usage:Name Phone Address Email
Example:Amy 0912345678 Taiwan amy@example.com.tw
Please input new information of user:Sean 0933555666 NTUST M10815096@mail.ntust.edu.tw
Modified the user successfully!

This is sorting by insertion method.

#      Name      Phone      Address      Email
-----
1      Sean      0933555666      NTUST      M10815096@mail.ntust.edu.tw
-----

There are 1 contacts in your list.
```

## 5. Delete a contact

(Check if really want to delete again)

```
Enter the choice:5

Usage of Delete : Name or Phone
Example:Amy or 0912345678
Please input user information:sean

Name      Phone      Address      Email
-----
Sean      0987654321      TaiwanTech      sean@gmail.com
-----

Are you sure to delete this user (y/n) ? y
Deleted the user successfully!

This is sorting by insertion method.

#      Name      Phone      Address      Email
-----
-----

There are 0 contacts in your list.
```

## 6. Import from file

```

*testData.txt - Notepad
File Edit Format View Help
Amy 0901 Taiwan amy@amy.com.tw
Ben 0902 USA ben@ben.com
Cindy 0903 Japan cindy@cindy.co.jp
David 0904 China david@david.com.cn
Erina 0905 Korea erina@erina.com.kr
Frank 0906 Russia frank@frank.com.ru
Hank 0907 Canada hank@hank.com.ca
George 0908 Mexico george@ge.com.mx

```

(add user information from specified file)

```

Enter the choice:6

Usage of Import : filepath
Example:./book.txt
Please input the filepath:testData.txt

Importing... Amy 0901 Taiwan amy@amy.com.tw
Importing... Ben 0902 USA ben@ben.com
Importing... Cindy 0903 Japan cindy@cindy.co.jp
Importing... David 0904 China david@david.com.cn
Importing... Erina 0905 Korea erina@erina.com.kr
Importing... Frank 0906 Russia frank@frank.com.ru
Importing... Hank 0907 Canada hank@hank.com.ca
Importing... George 0908 Mexico george@ge.com.mx
Imported the file successfully!

This is sorting by insertion method.

#      Name      Phone      Address      Email
-----
1      Amy       0901      Taiwan      amy@amy.com.tw
2      Ben       0902      USA         ben@ben.com
3      Cindy     0903      Japan       cindy@cindy.co.jp
4      David     0904      China       david@david.com.cn
5      Erina     0905      Korea       erina@erina.com.kr
6      Frank     0906      Russia      frank@frank.com.ru
7      Hank      0907      Canada      hank@hank.com.ca
8      George    0908      Mexico      george@ge.com.mx
-----

There are 8 contacts in your list.

```

## 7. Export to file

```

Enter the choice:7

Usage of Export : filepath
Example:./book.txt
Please input the filepath:outputfile.txt

Exported the file successfully!

```

```

outputfile.txt - Notepad
File Edit Format View Help

This is sorting by insertion method.

#      Name      Phone      Address      Email
-----
1      Amy       0901      Taiwan      amy@amy.com.tw
2      Ben       0902      USA         ben@ben.com
3      Cindy     0903      Japan       cindy@cindy.co.jp
4      David     0904      China       david@david.com.cn
5      Erina     0905      Korea       erina@erina.com.kr
6      Frank     0906      Russia      frank@frank.com.ru
7      Hank     0907      Canada      hank@hank.com.ca
8      George    0908      Mexico      george@ge.com.mx
-----

There are 8 contacts in your list.

```

## 8. Sorting

sorting by descending name method

```

Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:name 1

This is sorting by descending name method.

#      Name      Phone      Address      Email
-----
1      Hank     0907      Canada      hank@hank.com.ca
2      George   0908      Mexico      george@ge.com.mx
3      Frank     0906      Russia      frank@frank.com.ru
4      Erina     0905      Korea       erina@erina.com.kr
5      David     0904      China       david@david.com.cn
6      Cindy     0903      Japan       cindy@cindy.co.jp
7      Ben       0902      USA         ben@ben.com
8      Amy       0901      Taiwan      amy@amy.com.tw
-----

There are 8 contacts in your list.

```

sorting by ascending name method

```

Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:name 0

This is sorting by ascending name method.

```

#	Name	Phone	Address	Email
1	Amy	0901	Taiwan	amy@amy.com.tw
2	Ben	0902	USA	ben@ben.com
3	Cindy	0903	Japan	cindy@cindy.co.jp
4	David	0904	China	david@david.com.cn
5	Erina	0905	Korea	erina@erina.com.kr
6	Frank	0906	Russia	frank@frank.com.ru
7	George	0908	Mexico	george@ge.com.mx
8	Hank	0907	Canada	hank@hank.com.ca

```

-----
There are 8 contacts in your list.

```

sorting by ascending phone method

```

Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:phone 0

This is sorting by ascending phone method.

```

#	Name	Phone	Address	Email
1	Amy	0901	Taiwan	amy@amy.com.tw
2	Ben	0902	USA	ben@ben.com
3	Cindy	0903	Japan	cindy@cindy.co.jp
4	David	0904	China	david@david.com.cn
5	Erina	0905	Korea	erina@erina.com.kr
6	Frank	0906	Russia	frank@frank.com.ru
7	Hank	0907	Canada	hank@hank.com.ca
8	George	0908	Mexico	george@ge.com.mx

```

-----
There are 8 contacts in your list.

```

sorting by descending phone method

Enter the choice:8

Usage of Sorting : Column Order

0 is for ascending, and 1 is for descending.

Example:Name 0

Please input your sorting parameter:phone 1

This is sorting by descending phone method.

#	Name	Phone	Address	Email
1	George	0908	Mexico	george@ge.com.mx
2	Hank	0907	Canada	hank@hank.com.ca
3	Frank	0906	Russia	frank@frank.com.ru
4	Erina	0905	Korea	erina@erina.com.kr
5	David	0904	China	david@david.com.cn
6	Cindy	0903	Japan	cindy@cindy.co.jp
7	Ben	0902	USA	ben@ben.com
8	Amy	0901	Taiwan	amy@amy.com.tw

There are 8 contacts in your list.

sorting by ascending address method

Enter the choice:8

Usage of Sorting : Column Order

0 is for ascending, and 1 is for descending.

Example:Name 0

Please input your sorting parameter:address 0

This is sorting by ascending address method.

#	Name	Phone	Address	Email
1	Hank	0907	Canada	hank@hank.com.ca
2	David	0904	China	david@david.com.cn
3	Cindy	0903	Japan	cindy@cindy.co.jp
4	Erina	0905	Korea	erina@erina.com.kr
5	George	0908	Mexico	george@ge.com.mx
6	Frank	0906	Russia	frank@frank.com.ru
7	Amy	0901	Taiwan	amy@amy.com.tw
8	Ben	0902	USA	ben@ben.com

There are 8 contacts in your list.

sorting by descending address method

```
Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:address 1

This is sorting by descending address method.
```

#	Name	Phone	Address	Email
1	Ben	0902	USA	ben@ben.com
2	Amy	0901	Taiwan	amy@amy.com.tw
3	Frank	0906	Russia	frank@frank.com.ru
4	George	0908	Mexico	george@ge.com.mx
5	Erina	0905	Korea	erina@erina.com.kr
6	Cindy	0903	Japan	cindy@cindy.co.jp
7	David	0904	China	david@david.com.cn
8	Hank	0907	Canada	hank@hank.com.ca

```
There are 8 contacts in your list.
```

sorting by ascending email method

```
Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:email 0

This is sorting by ascending email method.
```

#	Name	Phone	Address	Email
1	Amy	0901	Taiwan	amy@amy.com.tw
2	Ben	0902	USA	ben@ben.com
3	Cindy	0903	Japan	cindy@cindy.co.jp
4	David	0904	China	david@david.com.cn
5	Erina	0905	Korea	erina@erina.com.kr
6	Frank	0906	Russia	frank@frank.com.ru
7	George	0908	Mexico	george@ge.com.mx
8	Hank	0907	Canada	hank@hank.com.ca

```
There are 8 contacts in your list.
```



sorting by descending email method

```
Enter the choice:8

Usage of Sorting : Column Order
0 is for ascending, and 1 is for descending.
Example:Name 0
Please input your sorting parameter:email 1

This is sorting by descending email method.
```

#	Name	Phone	Address	Email
1	Hank	0907	Canada	hank@hank.com.ca
2	George	0908	Mexico	george@ge.com.mx
3	Frank	0906	Russia	frank@frank.com.ru
4	Erina	0905	Korea	erina@erina.com.kr
5	David	0904	China	david@david.com.cn
6	Cindy	0903	Japan	cindy@cindy.co.jp
7	Ben	0902	USA	ben@ben.com
8	Amy	0901	Taiwan	amy@amy.com.tw

```
There are 8 contacts in your list.
```

9. Exit

```
Enter the choice:0

GoodBye
```