Testing Report

Unit testing report:

```
      CUnit - A unit testing framework for C - Version 2.1-3
      http://cunit.sourceforge.net/


Suite: suite for removing contact from a file ...
  Test: Test for removecontact() in sunny cases  ... passed
  Test: Test for removecontact() in rainy cases  ... passed
Suite: suite for changing group ...
  Test: Test for ToChgrp() in sunny cases  ... passed
  Test: Test for ToChgrp() in rainy cases  ... passed
Suite: suite for adding contact ...
  Test: Test for AuthenticatedAddData() in sunny cases  ... passed
  Test: Test for AuthenticatedAddData() in rainy cases  ... passed
Suite: suite for listing contact ...
  Test: Test for Tolistcontact() in sunny cases  ... passed
  Test: Test for Tolistcontact() in rainy cases  ... passed

Run Summary:     Type  Total     Ran Passed Failed Inactive
              suites      4       4    n/a      0        0
               tests      8       8      8      0        0
             asserts     24      24     24      0      n/a

Elapsed time =    0.002 seconds
```

Integration testing report:

IT_01:

```
└$ make client
../bin/client
Enter the Username :
Enter the password :
anonymous user

Enter the subcommand :ADD
ADD command should have two fields

Enter the subcommand :ADD 1
ADD command should have two fields

Enter the subcommand :list
Anonymous user should provide only ADD subcommand

Enter the subcommand :ADD sai,9009989098
Contact added

Enter the subcommand :addgrp
Anonymous user should provide only ADD subcommand

Enter the subcommand :chgrp
Anonymous user should provide only ADD subcommand

Enter the subcommand :ADD Ayeshkanta,8909089988
Contact added

Enter the subcommand :bye
```

IT_01, IT_02, IT_05, IT_06:

```
└─$ make client
../bin/client
Enter the Username :sai nath
Enter the password :group6
authenticated user

Enter the subcommand :addgrp
Authenticated users can only use ADD,rm,list,chgrp and bye/Bye subcommand
s

Enter the subcommand :ADD virat,1234
Authenticated user can't add the data to the public group

Enter the subcommand :list a
Matching contacts:
ad1,de1


Enter the subcommand :chgrp production
Group changed

Enter the subcommand :ADD vinay,7777888890
Contact added

Enter the subcommand :list v
Matching contacts:
vinay,7777888890

Enter the subcommand :list vin
Matching contacts:
vinay,7777888890

Enter the subcommand :list q
No contacts with given pattern

Enter the subcommand :rm vinay
Contact removed

Enter the subcommand :list q
No contacts with given pattern

Enter the subcommand :bye
```

IT_01, IT_02, IT_03, IT_04, IT_06:

```
  └$ make client
../bin/client
Enter the Username :admin
Enter the password :1
admin

Enter the subcommand :chgrp production
Admin can give addgrp,rmgrp,list,rm or ADD  subcommand only

Enter the subcommand :addgrp hr
Group added

Enter the subcommand :addgrp temp
Group added

Enter the subcommand :rmgrp temp
Group removed

Enter the subcommand :ADD utkarsh,6378998976
Provide three inputs name,phonenumber,filename

Enter the subcommand :ADD utkarsh,6378998976,production
contact added to the given group

Enter the subcommand :kist u,production
Admin can give addgrp,rmgrp,list,rm or ADD  subcommand only

Enter the subcommand :list u,production
Matching contacts:
utkarsh,6378998976

Enter the subcommand :rm arpita,public group
contact removed from the given group

Enter the subcommand :bye
```