

CSED232 Object Oriented Programming (Spring 2019)

Programming Assignment #3

Voting System2 실행 커맨드 로그 및 실행 화면 예시

Due Date: 2019년 4월 20일 토요일 23:59

담당조교: 김태욱 (taewook101@postech.ac.kr)

커맨드 로그 예시

```
1 1 1111 id1 pwd1
1 1 1112 id2 pwd2
1 1 1113 id3 pwd3
1 1 1114 id4 pwd4
1 2 id1 pwd1
2 8 group1
4 6
4 1
0 0
1 2 id2 pwd2
2 8 group1
2 8 group2
4 1
1 2 id3 pwd3
2 7 noGroup
2 7 group1
3 1
1 2 id4 pwd4
2 4 0 vote1 3
2 4 0 noVote 1
2 5
2 6 0 vote1 2 0
2 5
2 6 0 vote1 1 0
2 4 0 vote2 5
2 5
2 3 0 vote1
2 3 0 voteX
2 2 id4 pwd4
1 1 1114 id4 pwd4
0 0
1 2 id4 pwd4
2 7 group1
3 1
1 2 id4 pwd4
3 4 1 vote1 3
3 5
3 6 1 vote1 1 2
3 5
3 4 1 vote1 5
3 6 1 vote1 1 3
3 4 1 vote2 5
3 5
```

```

3 3 1 vote2
3 5
3 3 1 vote2
3 7
2 7 group1
3 2 id4 pwdX
3 2 id4 pwd4
0 0
1 2 id1 pwd1
4 1
1 2 id1 pwd1
4 3 1 vote2 6
4 5 1 vote2 1 2
4 5 1 vote2 1 2
4 4
0 0
4 6 id2
4 5 1 vote1 1 2
4 5 0 vote2 1 0
4 5 0 vote2 1 0
4 4
4 3 0 vote2 7
4 2 0 vote2
4 2 1 vote3

```

전체 실행 화면 예시

```

$ ./example.exe
Load log file?(1:yes, 0:no (log will be deleted)):
1

```

```

=====
Num: 1
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 1
Selected Menu: 1.1 Register as a Member
Resident Registration Number: 1111
ID: id1
Password:pwd1
Registration Done!

```

```

=====
Num: 2
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 1
Selected Menu: 1.1 Register as a Member

```

Resident Registration Number: 1112
ID: id2
Password:pwd2
Registration Done!

=====

Num: 3

=====

1.1 Register as a Member
1.2 Login
1.3 Program Exit

=====

[Current Position]:Non Member

Select Menu:1 1

Selected Menu: 1.1 Register as a Member

Resident Registration Number: 1113

ID: id3

Password:pwd3

Registration Done!

=====

Num: 4

=====

1.1 Register as a Member
1.2 Login
1.3 Program Exit

=====

[Current Position]:Non Member

Select Menu:1 1

Selected Menu: 1.1 Register as a Member

Resident Registration Number: 1114

ID: id4

Password:pwd4

Registration Done!

=====

Num: 5

=====

1.1 Register as a Member
1.2 Login
1.3 Program Exit

=====

[Current Position]:Non Member

Select Menu:1 2

Selected Menu: 1.2 Login

ID: id1

Password: pwd1

Login Success!

=====

Num: 6

=====

2.1 Logout
2.2 Unsubscribe from System

```
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id1, [Current Position]: Member
Select Menu:2 8
Selected Menu: 2.8 Create a Group
<Group List>
None
Group Name to Create: group1
Success!

=====
Num: 7
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 6
Selected Menu: 4.6 List All Group Members
<Group Members>
id1

=====
Num: 8
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 1
Selected Menu: 4.1 Logout
Logout Success

=====
Num: 9
=====
1.1 Register as a Member
```

```
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:0 0
<Member List>
[ID]: id1, [Joined Group]: group1, [Position]: Group Leader
[ID]: id2, [Joined Group]: None, [Position]: Member
[ID]: id3, [Joined Group]: None, [Position]: Member
[ID]: id4, [Joined Group]: None, [Position]: Member
<Group List>
group1
<General Votes>
None
<Group Votes>
group1: None
```

```
=====
Num: 10
=====
```

```
1.1 Register as a Member
1.2 Login
1.3 Program Exit
```

```
=====
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id2
Password: pwd2
Login Success!
```

```
=====
Num: 11
=====
```

```
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
```

```
=====
[ID]: id2, [Current Position]: Member
Select Menu:2 8
Selected Menu: 2.8 Create a Group
<Group List>
group1
Group Name to Create: group1
Failed
```

```
=====
Num: 12
=====
```

```
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id2, [Current Position]: Member
Select Menu:2 8
Selected Menu: 2.8 Create a Group
<Group List>
group1
Group Name to Create: group2
Success!

=====
Num: 13
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id2, [Current Position]: Group Leader, [Joined Group]: group2
Select Menu:4 1
Selected Menu: 4.1 Logout
Logout Success

=====
Num: 14
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id3
Password: pwd3
Login Success!

=====
Num: 15
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
```

```
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id3, [Current Position]: Member
Select Menu:2 7
Selected Menu: 2.7 Join Group
<Group List>
group1, group2
Group Name to Join: noGroup
not found
Failed

=====
Num: 16
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id3, [Current Position]: Member
Select Menu:2 7
Selected Menu: 2.7 Join Group
<Group List>
group1, group2
Group Name to Join: group1
Success!

=====
Num: 17
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id3, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 1
Selected Menu: 3.1 Logout
Logout Success

=====
```

```
Num: 18
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id4
Password: pwd4
Login Success!

=====
Num: 19
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 4
Selected Menu: 2.4 Add a New Vote Item
<General Votes>
None
Vote Subject: vote1
Number of Vote Items: 3
Vote Added!

=====
Num: 20
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 4
Selected Menu: 2.4 Add a New Vote Item
<General Votes>
vote1
Vote Subject: noVote
Number of Vote Items: 1
Request Failed
```


=====

Num: 21

=====

- 2.1 Logout
- 2.2 Unsubscribe from System
- 2.3 Delete Existing Vote Item
- 2.4 Add a Vote Item
- 2.5 List All Vote Items
- 2.6 Cast a Vote
- 2.7 Join Group
- 2.8 Create a Group
- 2.9 Program Exit

=====

[ID]: id4, [Current Position]: Member

Select Menu:2 5

Selected Menu: 2.5 List All Vote Items.

<General Vote>

Vote Subject: vote1, Vote Counts per Item - item1: 0 item2: 0 item3: 0

=====

Num: 22

=====

- 2.1 Logout
- 2.2 Unsubscribe from System
- 2.3 Delete Existing Vote Item
- 2.4 Add a Vote Item
- 2.5 List All Vote Items
- 2.6 Cast a Vote
- 2.7 Join Group
- 2.8 Create a Group
- 2.9 Program Exit

=====

[ID]: id4, [Current Position]: Member

Select Menu:2 6

Selected Menu: 2.6 Cast a Vote

<General Votes>

vote1

Vote Subject: vote1

Vote for(select 1 item):2

Request processed successfully!

=====

Num: 23

=====

- 2.1 Logout
- 2.2 Unsubscribe from System
- 2.3 Delete Existing Vote Item
- 2.4 Add a Vote Item
- 2.5 List All Vote Items
- 2.6 Cast a Vote
- 2.7 Join Group
- 2.8 Create a Group
- 2.9 Program Exit

```
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 5
Selected Menu: 2.5 List All Vote Items.
<General Vote>
Vote Subject: vote1, Vote Counts per Item - item1: 0 item2: 1 item3: 0
```

```
=====
Num: 24
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
```

```
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 6
Selected Menu: 2.6 Cast a Vote
<General Votes>
vote1
Vote Subject: vote1
Vote for(select 1 item):1
Vote casting failed!
```

```
=====
Num: 25
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
```

```
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 4
Selected Menu: 2.4 Add a New Vote Item
<General Votes>
vote1
Vote Subject: vote2
Number of Vote Items: 5
Vote Added!
```

```
=====
Num: 26
=====
```

```

2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 5
Selected Menu: 2.5 List All Vote Items.
<General Vote>
Vote Subject: vote1, Vote Counts per Item - item1: 0 item2: 1 item3: 0
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0

=====
Num: 27
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 3
Selected Menu: 2.3 Delete Existing Vote Item
<General Votes>
vote1, vote2
Vote Subject to Delete: vote1
Vote Deleted!

=====
Num: 28
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 3
Selected Menu: 2.3 Delete Existing Vote Item

```

```
<General Votes>
vote2
Vote Subject to Delete: voteX
Request Failed

=====
Num: 29
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 2
Selected Menu: 2.2 Unsubscribe from System
ID: id4
Password: pwd4
Unsubscribed from System!

=====
Num: 30
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 1
Selected Menu: 1.1 Register as a Member
Resident Registration Number: 1114
ID: id4
Password:pwd4
Registration Done!

=====
Num: 31
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:0 0
<Member List>
[ID]: id1, [Joined Group]: group1, [Position]: Group Leader
[ID]: id2, [Joined Group]: group2, [Position]: Group Leader
[ID]: id3, [Joined Group]: group1, [Position]: Group Member
[ID]: id4, [Joined Group]: None, [Position]: Member
<Group List>
```

```
group1, group2
<General Votes>
vote2
<Group Votes>
group1: None
group2: None
```

```
=====
```

```
Num: 32
```

```
=====
```

```
1.1 Register as a Member
1.2 Login
1.3 Program Exit
```

```
=====
```

```
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id4
Password: pwd4
Login Success!
```

```
=====
```

```
Num: 33
```

```
=====
```

```
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
```

```
=====
```

```
[ID]: id4, [Current Position]: Member
Select Menu:2 7
Selected Menu: 2.7 Join Group
<Group List>
group1, group2
Group Name to Join: group1
Success!
```

```
=====
```

```
Num: 34
```

```
=====
```

```
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
```

```
=====
```

```
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
```

```
Select Menu:3 1
Selected Menu: 3.1 Logout
Logout Success
```

```
=====
```

```
Num: 35
```

```
=====
```

```
1.1 Register as a Member
1.2 Login
1.3 Program Exit
```

```
=====
```

```
[Current Position]:Non Member
```

```
Select Menu:1 2
```

```
Selected Menu: 1.2 Login
```

```
ID: id4
```

```
Password: pwd4
```

```
Login Success!
```

```
=====
```

```
Num: 36
```

```
=====
```

```
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
```

```
=====
```

```
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
```

```
Select Menu:3 4
```

```
Selected Menu: 3.4 Add a New Vote Item
```

```
<General Votes>
```

```
vote2
```

```
<Group Votes>
```

```
None
```

```
Select Vote Type(0: general, 1: group): 1
```

```
Vote Subject: vote1
```

```
Number of Vote Items: 3
```

```
Vote Added!
```

```
=====
```

```
Num: 37
```

```
=====
```

```
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
```

```
=====
```

```
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
```

```
Select Menu:3 5
Selected Menu: 3.5 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 0 item2: 0 item3: 0

=====
Num: 38
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 6
Selected Menu: 3.6 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote1
Vote for(select 2 items): 1 2
Request processed successfully!

=====
Num: 39
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 5
Selected Menu: 3.5 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 1 item2: 1 item3: 0
```

```
=====
Num: 40
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 4
Selected Menu: 3.4 Add a New Vote Item
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote1
Number of Vote Items: 5
Request Failed

=====
Num: 41
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 6
Selected Menu: 3.6 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote1
Vote for(select 2 items): 1 3
Vote casting failed!

=====
Num: 42
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
```



```

3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 4
Selected Menu: 3.4 Add a New Vote Item
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote2
Number of Vote Items: 5
Vote Added!

=====
Num: 43
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 5
Selected Menu: 3.5 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 1 item2: 1 item3: 0
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0

=====
Num: 44
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 3
Selected Menu: 3.3 Delete Existing Vote Item
<General Votes>

```

```
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 1
Vote Subject to Delete: vote2
Vote Deleted!

=====
Num: 45
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 5
Selected Menu: 3.5 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 1 item2: 1 item3: 0

=====
Num: 46
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 3
Selected Menu: 3.3 Delete Existing Vote Item
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject to Delete: vote2
Request Failed

=====
Num: 47
=====
```

```

3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 7
Selected Menu: 3.7 Unregister from a Group
Success

=====
Num: 48
=====
2.1 Logout
2.2 Unsubscribe from System
2.3 Delete Existing Vote Item
2.4 Add a Vote Item
2.5 List All Vote Items
2.6 Cast a Vote
2.7 Join Group
2.8 Create a Group
2.9 Program Exit
=====
[ID]: id4, [Current Position]: Member
Select Menu:2 7
Selected Menu: 2.7 Join Group
<Group List>
group1, group2
Group Name to Join: group1
Success!

=====
Num: 49
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 2
Selected Menu: 3.2 Unsubscribe from System
ID: id4
Password: pwdX
Request Failed

=====

```

```

Num: 50
=====
3.1 Logout
3.2 Unsubscribe from System
3.3 Delete Existing Vote Item
3.4 Add a New Vote Item
3.5 List All Vote Items
3.6 Cast a Vote
3.7 Unsubscribe from Group
3.8 Program Exit
=====
[ID]: id4, [Current position]: Group Member, [Joined Group]: group1
Select Menu:3 2
Selected Menu: 3.2 Unsubscribe from System
ID: id4
Password: pwd4
Unsubscribed from System!

=====
Num: 51
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:0 0
<Member List>
[ID]: id1, [Joined Group]: group1, [Position]: Group Leader
[ID]: id2, [Joined Group]: group2, [Position]: Group Leader
[ID]: id3, [Joined Group]: group1, [Position]: Group Member
<Group List>
group1, group2
<General Votes>
vote2
<Group Votes>
group1: vote1
group2: None

=====
Num: 52
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id1
Password: pwd1
Login Success!

=====

```

```
Num: 53
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 1
Selected Menu: 4.1 Logout
Logout Success

=====
Num: 54
=====
1.1 Register as a Member
1.2 Login
1.3 Program Exit
=====
[Current Position]:Non Member
Select Menu:1 2
Selected Menu: 1.2 Login
ID: id1
Password: pwd1
Login Success!

=====
Num: 55
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 3
Selected Menu: 4.3 Add a New Vote Item
<General Votes>
vote2
<Group Votes>
vote1
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote2
Number of Vote Items: 6
Vote Added!

=====
```

```

Num: 56
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 5
Selected Menu: 4.5 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote2
Vote for(select 2 items): 1 2
Request processed successfully!

=====
Num: 57
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 5
Selected Menu: 4.5 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote2
Vote for(select 2 items): 1 2
Vote casting failed!

=====
Num: 58
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members

```

```

4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 4
Selected Menu: 4.4 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 0 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 1 item2: 1 item3: 0
Vote Subject: vote2, Vote Counts per Item - item1: 1 item2: 1 item3: 0 item4: 0
item5: 0 item6: 0

=====
Num: 59
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:0 0
<Member List>
[ID]: id1, [Joined Group]: group1, [Position]: Group Leader
[ID]: id2, [Joined Group]: group2, [Position]: Group Leader
[ID]: id3, [Joined Group]: group1, [Position]: Group Member
<Group List>
group1, group2
<General Votes>
vote2
<Group Votes>
group1: vote1, vote2
group2: None

=====
Num: 60
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 7
Selected Menu: 4.7 Ban a Group Member

```

Group Name to Unregister: id2
Failed

=====
Num: 61
=====

- 4.1 Logout
- 4.2 Delete Existing Vote Item
- 4.3 Add a New Vote Item
- 4.4 List All Vote Items
- 4.5 Cast a Vote
- 4.6 List All Group Members**
- 4.7 Ban a Member from Group
- 4.8 Program Exit

=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 5
Selected Menu: 4.5 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 1
Vote Subject: vote1
Vote for(select 2 items): 1 2
Request processed successfully!

=====
Num: 62
=====

- 4.1 Logout
- 4.2 Delete Existing Vote Item
- 4.3 Add a New Vote Item
- 4.4 List All Vote Items
- 4.5 Cast a Vote
- 4.6 List All Group Members**
- 4.7 Ban a Member from Group
- 4.8 Program Exit

=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 5
Selected Menu: 4.5 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 0
Vote Subject: vote2
Vote for(select 1 item):1
Request processed successfully!

=====
Num: 63
=====

- 4.1 Logout


```

4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 5
Selected Menu: 4.5 Cast a Vote
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 0
Vote Subject: vote2
Vote for(select 1 item):1
Vote casting failed!

=====
Num: 64
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 4
Selected Menu: 4.4 List All Vote Items.
<General Vote List>
Vote Subject: vote2, Vote Counts per Item - item1: 1 item2: 0 item3: 0 item4: 0
item5: 0
<Group Vote List>
Vote Subject: vote1, Vote Counts per Item - item1: 2 item2: 2 item3: 0
Vote Subject: vote2, Vote Counts per Item - item1: 1 item2: 1 item3: 0 item4: 0
item5: 0 item6: 0

=====
Num: 65
=====
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
=====

```

```
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 3
Selected Menu: 4.3 Add a New Vote Item
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 0
Vote Subject: vote2
Number of Vote Items: 7
Request Failed
```

```
=====
```

```
Num: 66
```

```
=====
```

```
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
```

```
=====
```

```
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 2
Selected Menu: 4.2 Delete Existing Vote Item
<General Votes>
vote2
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 0
Vote Subject to Delete: vote2
Vote Deleted!
```

```
=====
```

```
Num: 67
```

```
=====
```

```
4.1 Logout
4.2 Delete Existing Vote Item
4.3 Add a New Vote Item
4.4 List All Vote Items
4.5 Cast a Vote
4.6 List All Group Members
4.7 Ban a Member from Group
4.8 Program Exit
```

```
=====
```

```
[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1
Select Menu:4 2
Selected Menu: 4.2 Delete Existing Vote Item
<General Votes>
None
<Group Votes>
vote1, vote2
Select Vote Type(0: general, 1: group): 1
Vote Subject to Delete: vote3
```

Request Failed

=====

Num: 68

=====

4.1 Logout

4.2 Delete Existing Vote Item

4.3 Add a New Vote Item

4.4 List All Vote Items

4.5 Cast a Vote

4.6 List All Group Members

4.7 Ban a Member from Group

4.8 Program Exit

=====

[ID]: id1, [Current Position]: Group Leader, [Joined Group]: group1

Select Menu: