

How to get access to the program?

```
git clone https://github.com/ShuqingYe1997/253P-Lab1.git
cd 253P-Lab1
cd src
javac Roster.java
java Roster
```

```
shuqiny2@circinus-33 17:30:03 ~/hw/lab1/253P-Lab1/src
$ javac Roster.java
shuqiny2@circinus-33 17:30:13 ~/hw/lab1/253P-Lab1/src
$ java Roster
```

Program started!

Create a program that automatically takes in a class roster file called `roster.txt`, and creates small random groups of a dynamically specified size.

Input:

1. roster file *roster.txt*
2. an integer specifying the size of the groups (entered via stdin)
3. absent students (entered via stdin; format up to developer)

Output:

an easy to read list of numbered group assignments. If there are left-over students, each should be added to a different existing group, making those groups one larger than the specified size

Let's start with 2 regular cases. When we input group size = 4 and absent students = ["Bobak Pezeshki", "Ray Klefstad"], and the result is 3 groups of five, just as expected!

```
shuqiny2@circinus-33 17:30:42 ~/hw/lab1/253P-Lab1/src
$ java Roster
Group size:4
Absent students:Bobak Pezeshki
Ray Klefstad

Groups:
1.YASAMAN TAVAKOLI
M CONG
BRIAN LENO
JERIO KIMI
KIM ROSEN WILL
2.CLAUDIO PARRAM
WONNIE YUNES
MICHAEL JOANG
BOB JALLAL
JI-WON LOMATI
3.MOSO KOMO
KYU-SEON KILOO
OMIMI HOM
ETHEL MOSHIL
JOSH MARTIN WIM
```

When we use group size = 3 and absent students = ["Ray Klefstad"], we expect the result to be 1 group of 4 and 4 group of 3.

```
$ java Roster
Group size:3
Absent students:Ray Klefstad

Groups:
1.ETHEL MOSHIL
KIM ROBEN WILL
MICHAEL JOANG
CLAUDIO PARRAM
2.MOSO KOMO
KYU-SEON KILOO
JERIO KIMI
3.M CONG
JOSH MARTIN WIM
YASAMAN TAVAKOLI
4.JI-WON LOMATI
OMIMI HOM
BRIAN LENO
5.WONNIE YUNES
BOBAK PEZESHKI
BOB JALLAL
```

Let's try some edge cases.

- group size = 17

absent students = []

Expected output: 1 group of 17.

```
shuqiny2@circinus-33 17:38:31 ~/hw/lab1/253P-Lab1/src
$ java Roster
Group size:17
Absent students:
Groups:
1.CLAUDIO PARRAM
JERIO KIMI
YASAMAN TAVAKOLI
BOB JALLAL
KIM ROBEN WILL
WONNIE YUNES
MICHAEL JOANG
M CONG
BOBAK PEZESHKI
BRIAN LENO
ETHEL MOSHIL
RAY KLEFSTAD
JI-WON LOMATI
JOSH MARTIN WIM
MOSO KOMO
KYU-SEON KILOO
OMIMI HOM
```

- group size = 1

absent students = []

Expected output: 17 groups of 1.

```
shuginy2@circinus-33 17:45:43 ~/hw/lab1/253P-Lab1/src
$ java Roster
Group size:1
Absent students:
Groups:
1.M CONG
2.YASAMAN TAVAKOLI
3.JOSH MARTIN WIM
4.ETHEL MOSHIL
5.KIM ROBEN WILL
6.KYU-SEON KILOO
7.MOSO KOMO
8.BRIAN LENO
9.JI-WON LOMATI
10.JERIO KIMI
11.BOB JALLAL
12.MICHAEL JOANG
13.BOBAK PEZESHKI
14.WONNIE YUNES
15.OMIMI HOM
16.CLAUDIO PARRAM
17.RAY KLEFSTAD
```

- group size = 18

absent students = []

Expected output: 1 group of 17.

```
Invalid number! Group size:18
Absent students:
Groups:
1.KYU-SEON KILOO
JI-WON LOMATI
MICHAEL JOANG
ETHEL MOSHIL
KIM ROBEN WILL
RAY KLEFSTAD
M CONG
OMIMI HOM
JOSH MARTIN WIM
BOB JALLAL
YASAMAN TAVAKOLI
JERIO KIMI
BOBAK PEZESHKI
BRIAN LENO
CLAUDIO PARRAM
WONNIE YUNES
MOSO KOMO
```

- group size = 0

absent students = []

Expected output: error and asking to re-input

```
$ java Roster
Group size:0
Invalid number! Group size:
```

- group size = 4

absent students = [all the students enrolled]

Expected output: 0 groups

```
shuqiny2@circinus-33 17:51:31 ~/hw/lab1/253P-Lab1/src
$ java Roster
Group size:4
Absent students:KYU-SEON KILOO
JI-WON LOMATI
MICHAEL JOANG
ETHEL MOSHIL
KIM ROBEN WILL
RAY KLEFSTAD
M CONG
OMIMI HOM
JOSH MARTIN WIM
BOB JALLAL
YASAMAN TAVAKOLI
JERIO KIMI
BOBAK PEZESHKI
BRIAN LENO
CLAUDIO PARRAM
WONNIE YUNES
MOSO KOMO

Groups:
```

This program seems to work fine~