

## User Guide



**CliTutors** is a desktop app for **managing private tutoring jobs**, optimized for use via a **Command Line Interface (CLI)** while still having the benefits of a Graphical User Interface (GUI). If you are a private tuition agency with a **big list of tutors to manage**, **CliTutors** can help you to manage matching tutors and students for private tuition faster than using a regular database.

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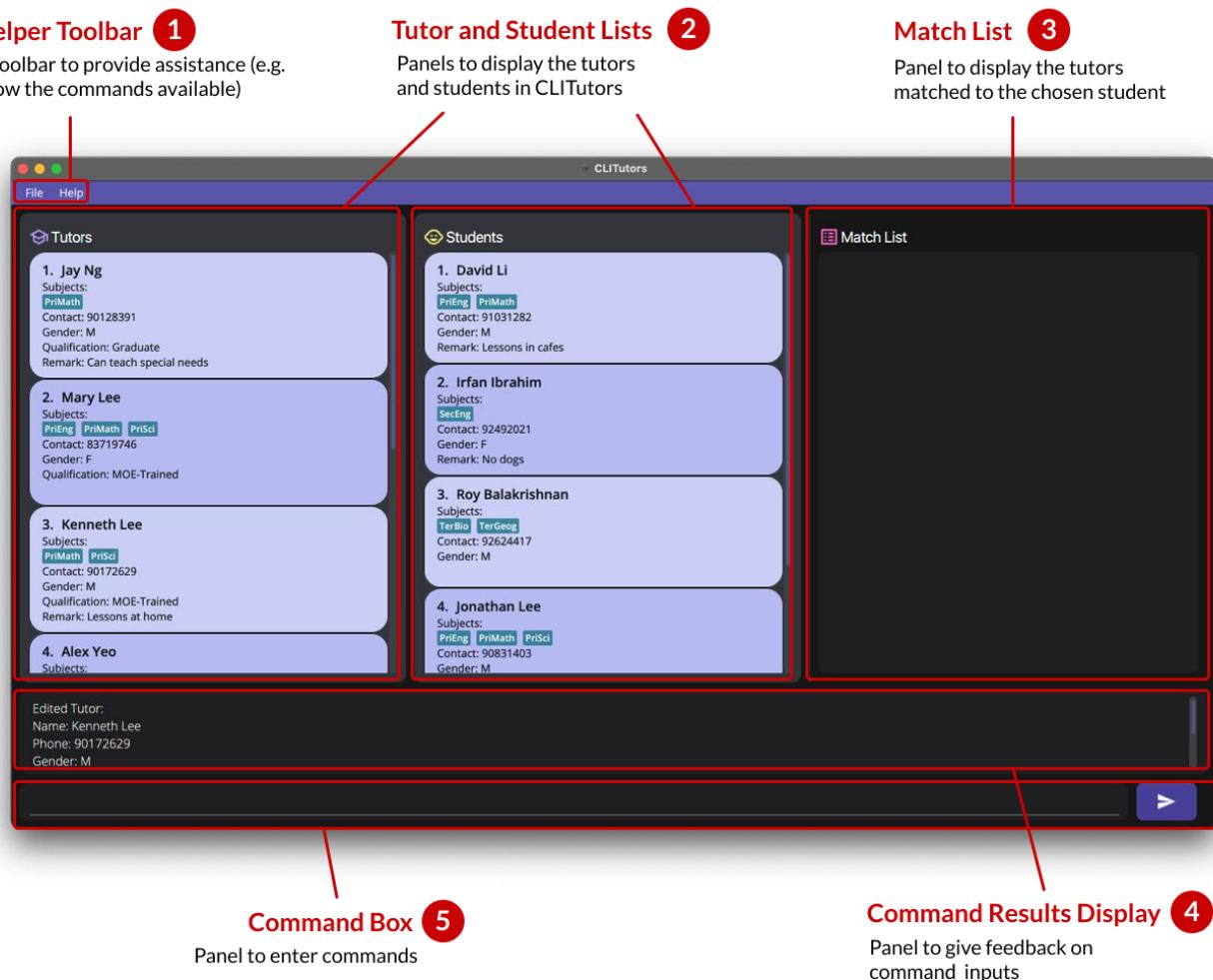
# Navigating the User Guide

Before going into the rest of the content in our user guide, here are a few **important** syntax to take note of to facilitate your reading:

Syntax	Description
<b>Bold</b>	Important words to note
Codeblock	Denotes distinct classes, their methods or examples
Keyboard	Keyboard actions
 Note	Useful information/tips
 Caution	Important things to take note of

# Quick start

1. Ensure you have Java 11 or above installed on your computer.
2. Download the latest `clitutors.jar`.
3. Copy the file to the folder you want to use as the *home folder* for `CliTutors`.
4. Double-click the file to start the application. A GUI containing the annotated **5 main components** should show up as below. Note how the application contains some sample data:



5. Try typing `match 1` in the **Command Box** and press Enter (or click the ➤ button on the GUI) to execute it.
6. You should see the results appear on the **Match List**. You can see whether your command was successful from the **Command Results Display** as well.
7. For a **quick overview** of all available commands, please refer to our [Command Summary](#).

8. For the **details** of each command, please proceed to the next section on [Features](#).
  9. When you are ready to start adding your own data, clear the **Tutor and Student Lists** using `clear t` and `clear s` respectively.
  10. If you are new and unsure of what the **expected outcomes** are for each command, fret not! The *before* and *after* state of an example command input is illustrated under each command.
- 

## Command Syntax

Before diving into the details, let us first look at what makes up a command:

Component	Description
Command Word	The keyword representing the action of the command
Preamble	The keyword representing <code>Person</code> and/or <code>INDEX</code>
Prefix	The keyword to recognise the parameters
Parameter	Argument given directly behind prefix and contains the corresponding value

**i Note:** There are **two** main `Person` types in `CliTutors`, namely `Tutor` and `Student`, represented by `t` and `s` in the preamble respectively.

An example of a basic command to add a tutor could look like the following:

```
add t n/John Doe p/98765432 g/M q/2 t/TE TM TL
```

In the example above, `add` is the **command word** and `t` is the **preamble** representing tutor. `n/`, `g/`, `p/`, `q/` and `t/` are the **prefixes** and `John Doe`, `M`, `98765432`, `2`, `TE` `TM` `TL` are the **parameters**.

For your convenience, a list of all parameters along with their prefixes has been included in the table below.

Parameter	Description	Argument Requirements
-----------	-------------	-----------------------

Parameter	Description	Argument Requirements
n/	Name	Contains alphanumeric characters and spaces, not blank, and it should be 1 to 50 characters long
p/	Phone Number	Contains numbers, and it should be 8 digits long
g/	Gender	Must be M / m for Male, F / f for Female
q/	Qualification	<a href="#">Valid qualifications</a>
r/	Remark	Contains not more than 100 characters
t/	Tags	<a href="#">Valid tags</a>

## Features

### Notes about the command format:

- A whitespace **must** be included before every prefix.  
e.g. `edit t 1 n/Alex Yeo q/2` is acceptable but `edit t 1 n/Alex Yeoq/2` is not.
- Parameters may be entered **in any order**.  
e.g. Both `n/John q/1` and `q/1 n/John` are acceptable.
- Words in `UPPER_CASE` are the parameters to be supplied by the user.  
e.g. The format `add t n/NAME` can be written as `add t n/John Doe`.
- Parameters in square brackets are **optional**.  
e.g. `n/NAME [r/REMARK]` can be used as `n/John Doe r/This is a remark` or as `n/John Doe`.
- Parameters with `...` after them can have **multiple arguments** in them.  
e.g. `t/TAG...` can be used as `t/PM` or `t/PM SC TB` etc.
- If a parameter is expected only once in the command, but you specified it multiple times, only the last occurrence of the parameter will be taken.  
e.g. if you specify `p/12341234 p/56785678`, only `p/56785678` will be taken.
- Excess parameters for commands that do not take in parameters (such as `help` and `exit`) will be ignored.

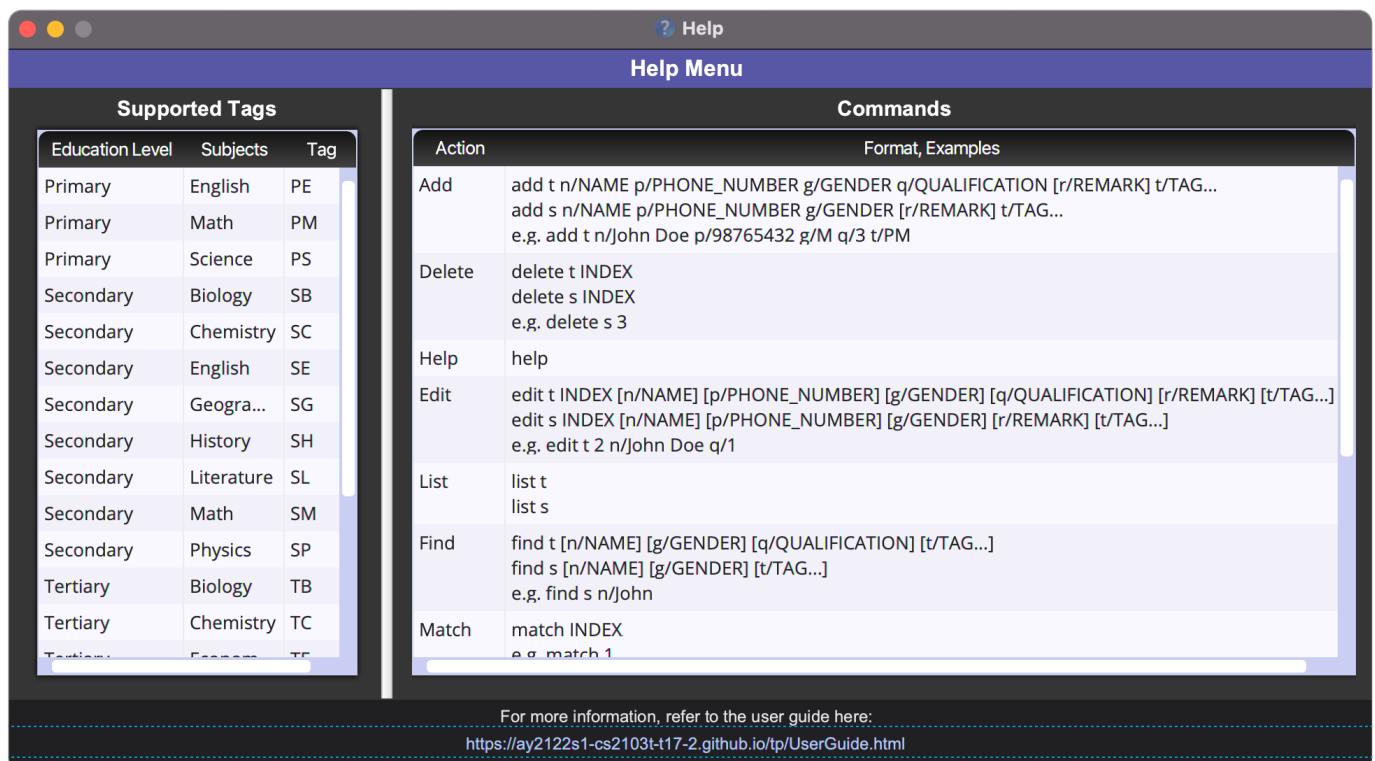
e.g. if the command specifies `help 123`, it will be interpreted as `help`.

- Commands with `t` modify attributes of **tutors** while commands with `s` modify attributes of **students**.  
e.g. `delete t 1` stands for deleting the tutor at index `1` in the list of tutors.
- For Commands with the format “Command Word / Alias”, the Command Word can be substituted for its Alias.  
e.g. Both `delete t 1` and `d t 1` represent the same command.

## Viewing help: `help`

Opens a window with all the commands available to use on CLITutors.

### ▼ Expected outcome:



## Adding a tutor or student: `add` / `a`

Adds a tutor/student to CLITutors.

Format:

```
add t n/NAME p/PHONE_NUMBER g/GENDER q/QUALIFICATION [r/REMARK] t/TAG...
add s n/NAME p/PHONE_NUMBER g/GENDER [r/REMARK] t/TAG...
```

### Note:

- We support adding tutors/students with the same name.
- Tutors/students with the **same phone number will be counted as duplicates** in our app, which is not allowed.

Examples:

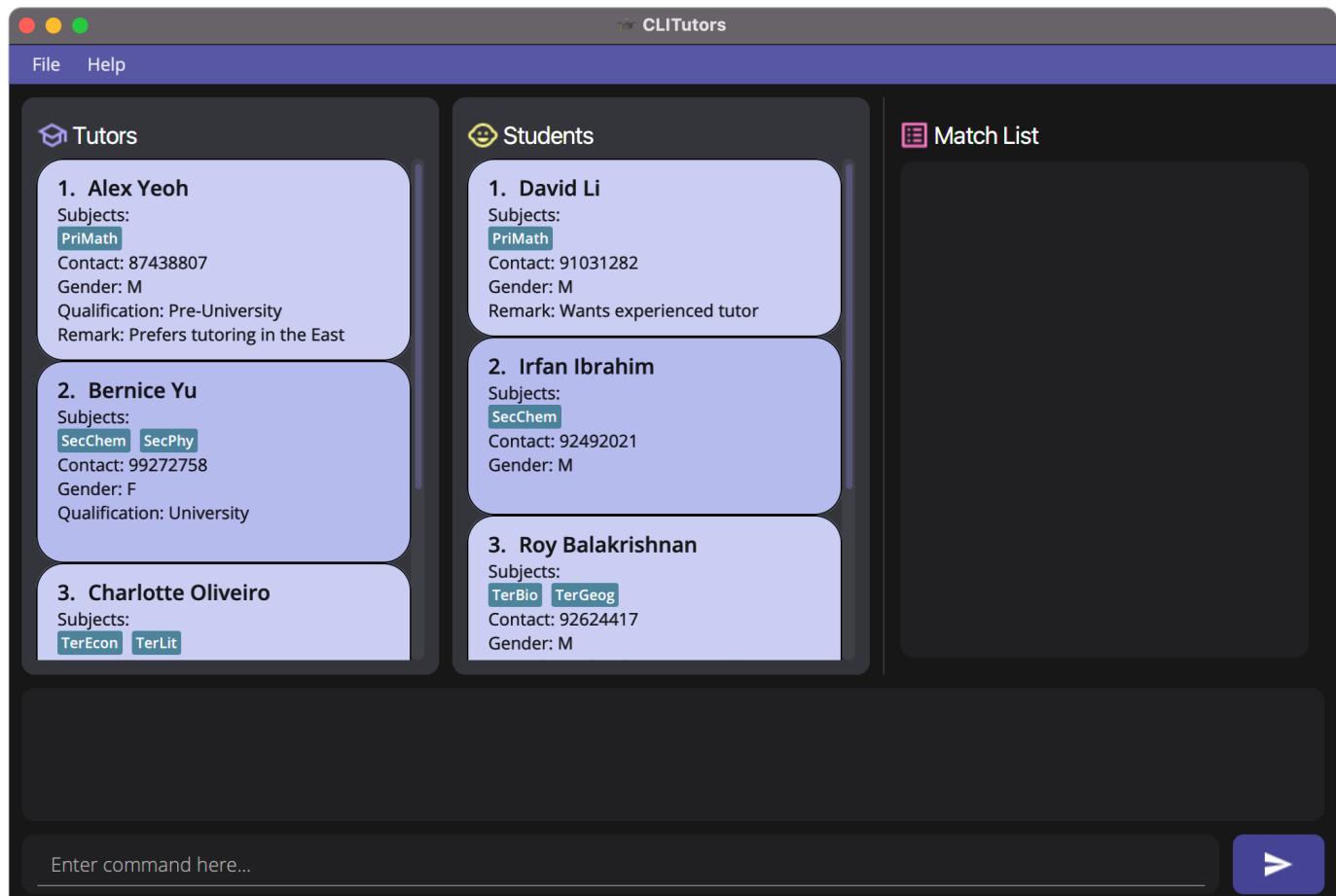
```
add t n/John Doe p/98765432 g/M q/2 t/PM TE TM TL
```

```
a s n/Mary Sue p/98769420 g/F r/Wants tutor urgently t/PM PE
```

▼ Expected outcome:

Command Executed: `add t n/John Doe p/98765432 g/M q/2 t/PM TE TM TL`

Before:



After:

The screenshot shows the CLITutors application window. The top menu bar includes 'File' and 'Help'. The main interface is divided into three main sections:

- Tutors**: A list of tutors with their details:
  - 1. Charlotte Oliveira: Subjects: TerEcon, TerLit; Contact: 93210283; Gender: F; Qualification: Graduate; Remark: Only does remote tuition.
  - 2. John Doe: Subjects: PriMath, TerEcon, TerLit, TerMath; Contact: 98765432; Gender: M; Qualification: Graduate.
- Students**: A list of students with their details:
  - 1. David Li: Subjects: PriMath; Contact: 91031282; Gender: M; Remark: Wants experienced tutor.
  - 2. Irfan Ibrahim: Subjects: SecChem; Contact: 92492021; Gender: M.
  - 3. Roy Balakrishnan: Subjects: TerBio, TerGeog; Contact: 92624417; Gender: M.
- Match List**: An empty section.

At the bottom left, there is a message: "New tutor added: Name: John Doe Phone: 98765432 Gender: M". Below that is a text input field with placeholder "Enter command here..." and a blue send button with a white arrow icon.

## Editing a tutor or student: `edit` / `e`

Edits an existing tutor/student in CLITutors.

Format:

```
edit t INDEX [n/NAME] [p/PHONE_NUMBER] [g/GENDER] [q/QUALIFICATION] [r/REMARK]  
[t/TAG...]  
edit s INDEX [n/NAME] [p/PHONE_NUMBER] [g/GENDER] [r/REMARK] [t/TAG...]
```

- Edits the tutor/student at the specified `INDEX`. The index refers to the index number shown in the **displayed Tutor/Student List**. The index **must be a positive integer**, i.e. 1, 2, 3...
- **At least one** of the optional fields must be provided.
- Existing values will be updated to the input values.
- You must specify **at least one** tag when editing the tags with `t/`.

### ! Caution:

- Editing information of any `Person` will override the current information stored about the specified `Person`.
- When editing tags, the existing tags of the tutor/student will be removed i.e. adding of tags is not cumulative.

Examples:

```
edit t 2 n/John Doe g/M q/2 t/PM TE TM TL  
e s 2 n/Mary Sue p/98765432
```

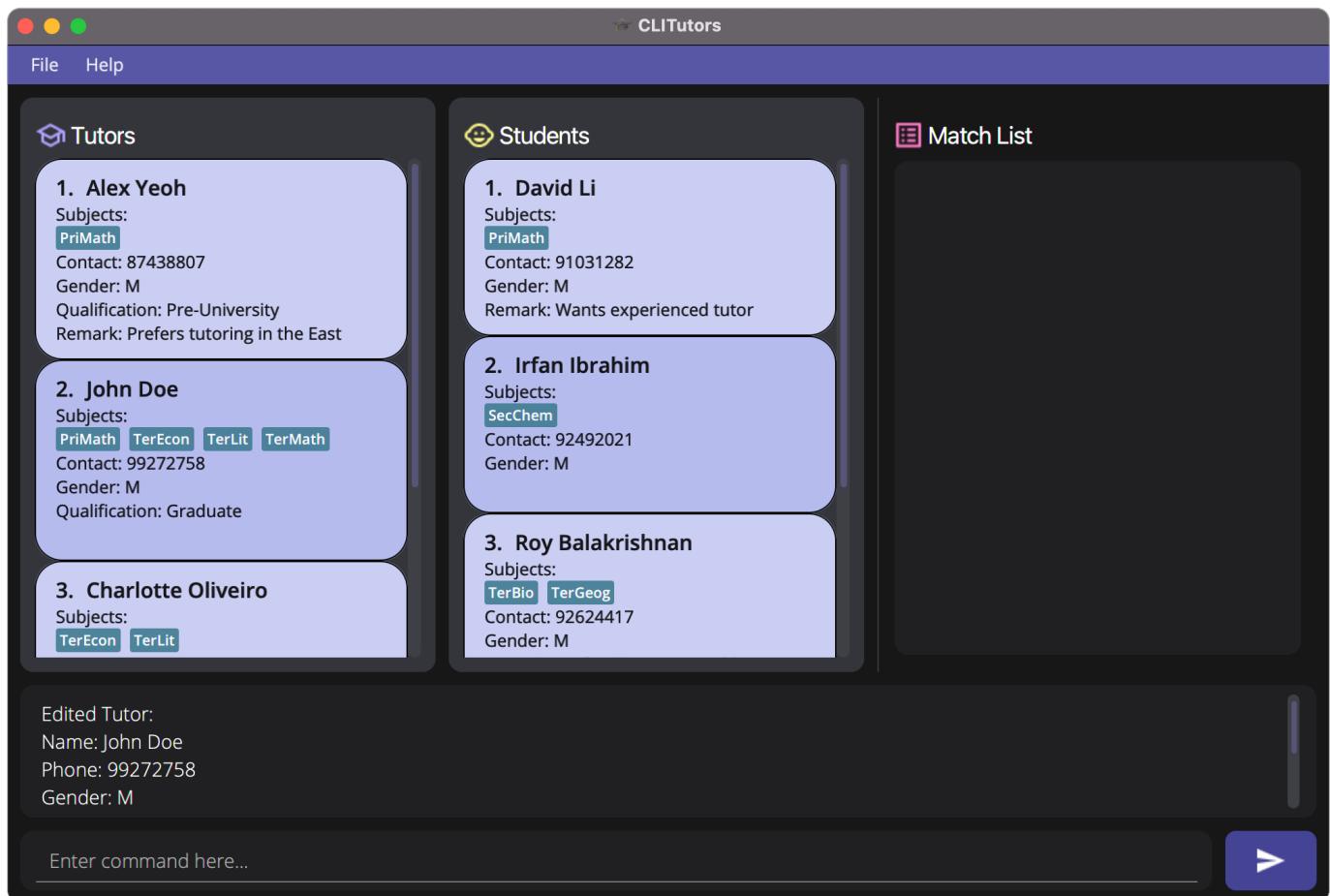
▼ Expected outcome:

Command Executed: `edit t 2 n/John Doe g/M q/2 t/PM TE TM TL`

Before:

The screenshot shows the CLITutors application window. The top menu bar includes 'File' and 'Help'. The main interface is divided into three sections: 'Tutors', 'Students', and 'Match List'. The 'Tutors' section contains three entries: 1. Alex Yeoh (Subjects: PriMath, Contact: 87438807, Gender: M, Qualification: Pre-University, Remark: Prefers tutoring in the East), 2. Bernice Yu (Subjects: SecChem, SecPhy, Contact: 99272758, Gender: F, Qualification: University), and 3. Charlotte Oliveira (Subjects: TerEcon, TerLit). The 'Students' section contains three entries: 1. David Li (Subjects: PriMath, Contact: 91031282, Gender: M, Remark: Wants experienced tutor), 2. Irfan Ibrahim (Subjects: SecChem, Contact: 92492021, Gender: M), and 3. Roy Balakrishnan (Subjects: TerBio, TerGeog, Contact: 92624417, Gender: M). The 'Match List' section is currently empty. At the bottom, there is a text input field with placeholder 'Enter command here...' and a blue send button with a white arrow icon.

After:



## Deleting a tutor or student: `delete / d`

Deletes the tutor/student at the specified `INDEX` from CLITutors.

Format:

```
delete t INDEX  
delete s INDEX
```

- The `INDEX` refers to the index number shown on the **displayed Tutor/Student List**.
- The `INDEX` **must be a positive integer**.  
e.g. `1, 2, 3, ...`

Examples:

`list t` followed by `delete t 2` deletes the 2nd person in the Tutor List.

`find t n/Betsy` followed by `d t 1` deletes the 1st person in the results of the find command for the Tutor List.

▼ Expected outcome:

Command Executed: `delete t 2`

Before:

CLITutors

File Help

**Tutors**

- 1. Alex Yeoh**  
Subjects:  
**PriMath**  
Contact: 87438807  
Gender: M  
Qualification: Pre-University  
Remark: Prefers tutoring in the East
- 2. Bernice Yu**  
Subjects:  
**SecChem** **SecPhy**  
Contact: 99272758  
Gender: F  
Qualification: University
- 3. Charlotte Oliveira**  
Subjects:  
**TerEcon** **TerLit**

**Students**

- 1. David Li**  
Subjects:  
**PriMath**  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
**SecChem**  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
**TerBio** **TerGeog**  
Contact: 92624417  
Gender: M

Match List

Enter command here... ➤

After:

CLITutors

File Help

**Tutors**

- 1. Alex Yeoh**  
Subjects:  
**PriMath**  
Contact: 87438807  
Gender: M  
Qualification: Pre-University  
Remark: Prefers tutoring in the East
- 2. Charlotte Oliveira**  
Subjects:  
**TerEcon** **TerLit**  
Contact: 93210283  
Gender: F  
Qualification: Graduate  
Remark: Only does remote tuition

**Students**

- 1. David Li**  
Subjects:  
**PriMath**  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
**SecChem**  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
**TerBio** **TerGeog**  
Contact: 92624417  
Gender: M

Match List

Deleted Tutor:  
Name: Bernice Yu  
Phone: 99272758  
Gender: F

Enter command here... ➤

## Listing all tutors or students: `list / l`

Shows the list of all tutors/students.

Format:

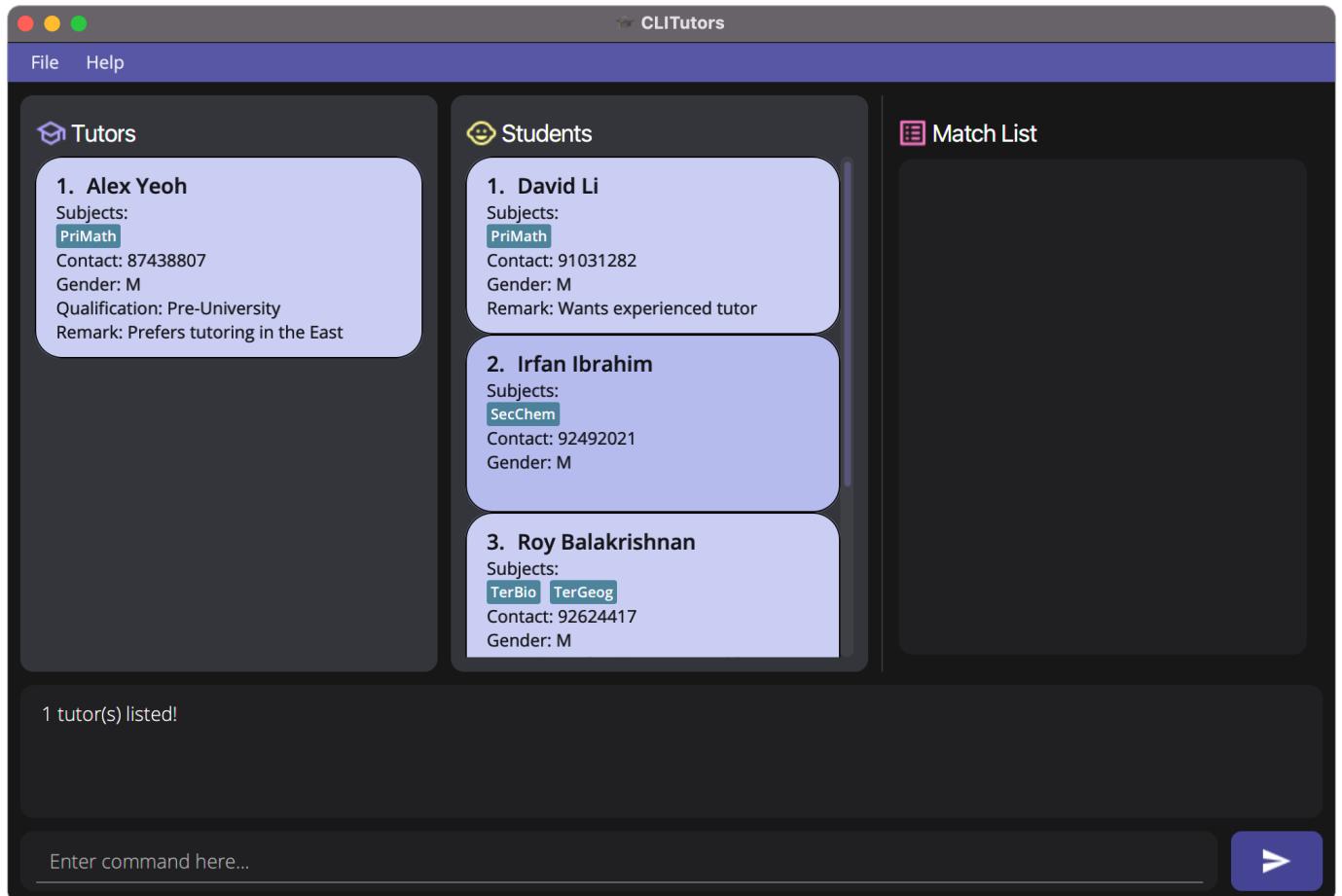
`list t`

`list s`

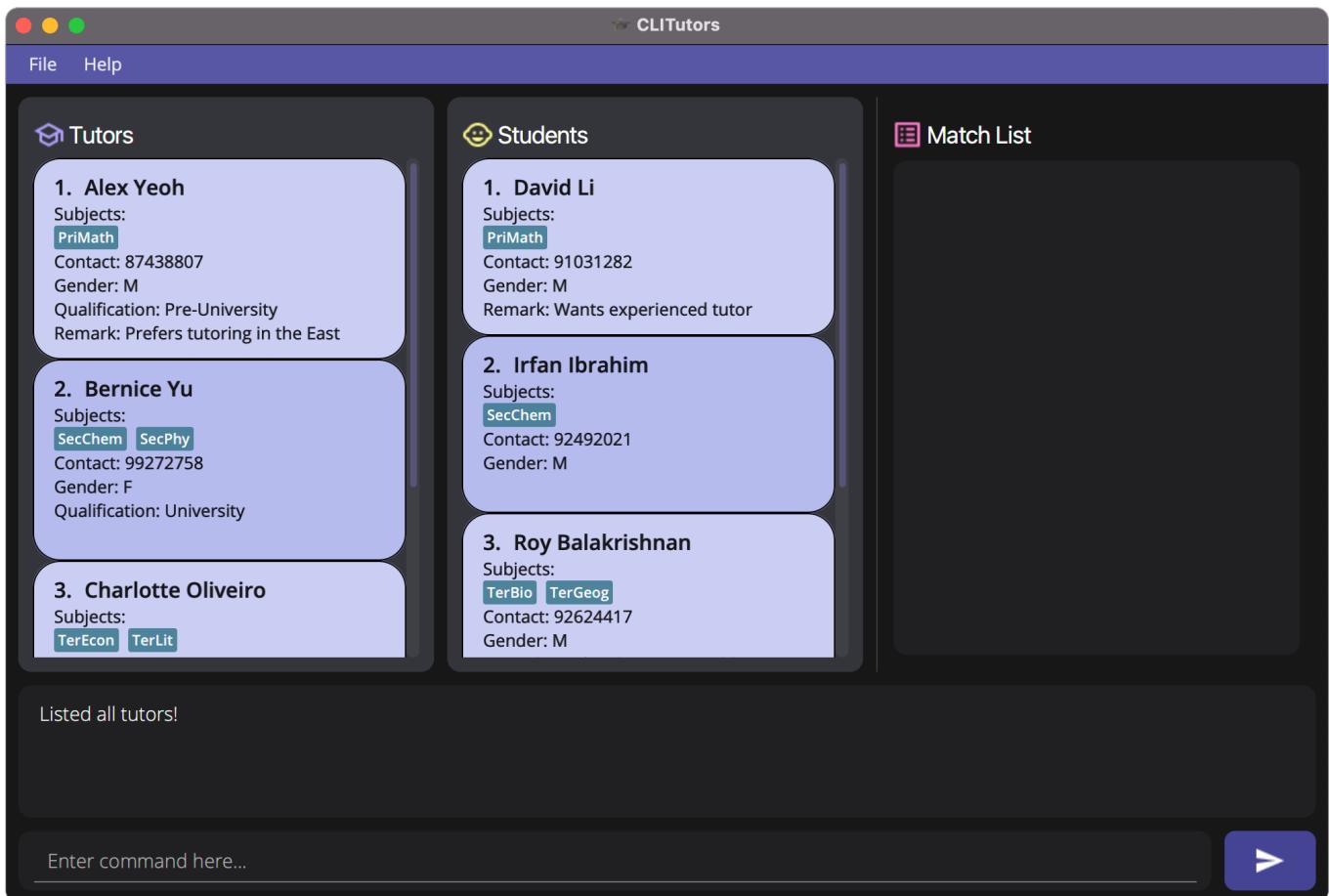
▼ Expected outcome:

Commands Executed: `find t g/M`, then `list t`

Before (when `find t g/M` is executed):



After (when `list t` is executed):



## Finding a tutor or student: `find / f`

Finds tutor(s)/student(s) that match with the specified parameters.

Format:

```
find t [n/NAME] [g/GENDER] [q/QUALIFICATION] [t/TAG...]  
find s [n/NAME] [g/GENDER] [t/TAG...]
```

- The search is case-insensitive.  
e.g. `n/hans` will match `Hans`.
- Only full words will be matched.  
e.g. `n/Han` will not match `Hans`, and `n/Han Solo` will not match `Han Dan`.
- **At least one** of the optional fields must be provided.
- You must specify **at least one** tag when finding tags with `t/`.

Example:

```
find t n/Yu t/SC  
f s g/M t/PS
```

▼ Expected outcome:

Command Executed: `find t n/Yu t/SC`

Before:

CLITutors

File Help

**Tutors**

- 1. Alex Yeoh**  
Subjects:  
`PriMath`  
Contact: 87438807  
Gender: M  
Qualification: Pre-University  
Remark: Prefers tutoring in the East
- 2. Bernice Yu**  
Subjects:  
`SecChem` `SecPhy`  
Contact: 99272758  
Gender: F  
Qualification: University
- 3. Charlotte Oliveira**  
Subjects:  
`TerEcon` `TerLit`

**Students**

- 1. David Li**  
Subjects:  
`PriMath`  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
`SecChem`  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
`TerBio` `TerGeog`  
Contact: 92624417  
Gender: M

Match List

Enter command here... ➤

After:

CLITutors

File Help

**Tutors**

- 1. Bernice Yu**  
Subjects:  
`SecChem` `SecPhy`  
Contact: 99272758  
Gender: F  
Qualification: University

**Students**

- 1. David Li**  
Subjects:  
`PriMath`  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
`SecChem`  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
`TerBio` `TerGeog`  
Contact: 92624417  
Gender: M

Match List

1 tutor(s) listed!

Enter command here... ➤

## Matching tutor(s) to a student: `match` / `m`

Matches tutor(s) who teach(es) the subject(s) that the student wants, and sorts the matched tutor(s) in decreasing order by the number of tags matched.

Format:

```
match INDEX
```

- The `INDEX` refers to the index number shown on the **displayed Student List**.
- The `INDEX` **must be a positive integer**.  
e.g. `1`, `2`, `3`, ...

Example:

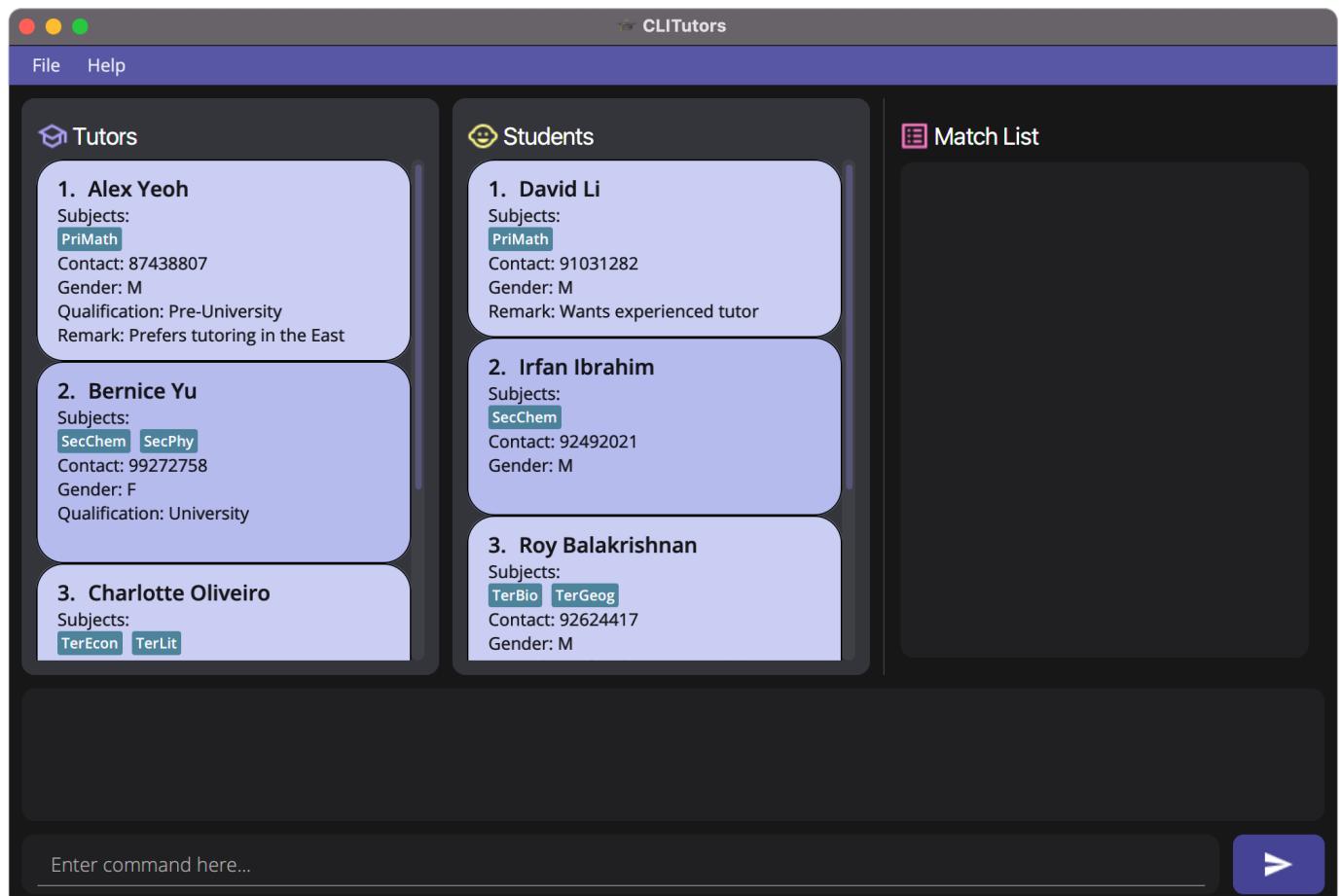
```
match 1
```

```
m 2
```

▼ Expected outcome:

Command Executed: `match 1`

Before:



After:

The screenshot shows the CLITutors application window. It has three main panels:

- Tutors**: A list of three tutors with their details:
  - Alex Yeoh**: Subjects: PriMath, Contact: 87438807, Gender: M, Qualification: Pre-University, Remark: Prefers tutoring in the East.
  - Bernice Yu**: Subjects: SecChem, SecPhy, Contact: 99272758, Gender: F, Qualification: University.
  - Charlotte Oliveira**: Subjects: TerEcon, TerLit.
- Students**: A list of three students with their details:
  - David Li**: Subjects: PriMath, Contact: 91031282, Gender: M, Remark: Wants experienced tutor.
  - Irfan Ibrahim**: Subjects: SecChem, Contact: 92492021, Gender: M.
  - Roy Balakrishnan**: Subjects: TerBio, TerGeog, Contact: 92624417, Gender: M.
- Match List**: A list of one matched tutor:
  - Alex Yeoh**: Subjects: PriMath, Contact: 87438807, Gender: M, Qualification: Pre-University, Remark: Prefers tutoring in the East.

Below the panels, a message says "Successfully matched David Li". At the bottom, there is a command input field "Enter command here..." and a purple "▶" button.

## Filtering tutors from the matched tutors: `filter`

Filters tutor(s) from the **list of matched tutors**.

Format:

```
filter [n/NAME] [g/GENDER] [q/QUALIFICATION]
```

- The search is case-insensitive.  
e.g. `n/hans` will match `Hans`.
- Only full words will be matched.  
e.g. `n/Han` will not match `Hans`, and `n/Han Solo` will not match `Han Dan`.
- **At least one** of the optional fields must be provided.

### ! Caution:

- `filter` cannot be used on an empty Match List.
- Users are expected to type the `match` command again if they wish to apply `filter` individually, as multiple `filter` commands used concurrently on a non-empty Match List will **continue to narrow down** the search.

Example:

```
filter g/F
```

▼ Expected outcome:

Commands Executed: `edit t 2 t/PM`, then `match 1`, followed by `filter g/F`

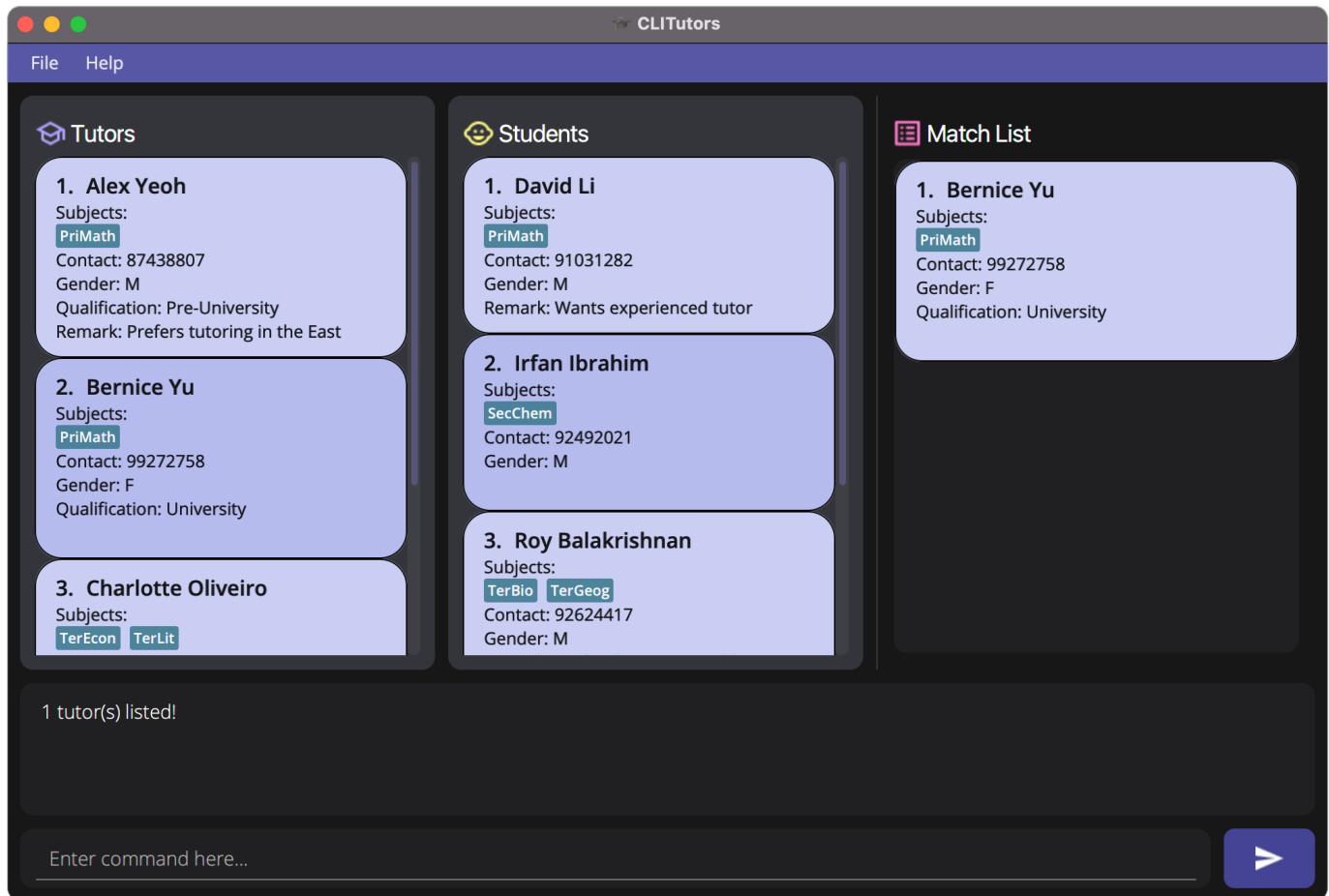
Before (when `edit t 2 t/PM`, then `match 1` is executed):

The screenshot shows the CLITutors application interface. It has three main panels: **Tutors**, **Students**, and **Match List**.

- Tutors Panel:** Contains three entries:
  - Alex Yeoh**: Subjects: PriMath; Contact: 87438807; Gender: M; Qualification: Pre-University; Remark: Prefers tutoring in the East.
  - Bernice Yu**: Subjects: PriMath; Contact: 99272758; Gender: F; Qualification: University.
  - Charlotte Oliveira**: Subjects: TerEcon, TerLit.
- Students Panel:** Contains three entries:
  - David Li**: Subjects: PriMath; Contact: 91031282; Gender: M; Remark: Wants experienced tutor.
  - Irfan Ibrahim**: Subjects: SecChem; Contact: 92492021; Gender: M.
  - Roy Balakrishnan**: Subjects: TerBio, TerGeog; Contact: 92624417; Gender: M.
- Match List Panel:** Shows the matched pairs:
  - Alex Yeoh**: Subjects: PriMath; Contact: 87438807; Gender: M; Qualification: Pre-University; Remark: Prefers tutoring in the East.
  - David Li**: Subjects: PriMath; Contact: 91031282; Gender: M; Remark: Wants experienced tutor.

At the bottom, a message says "Successfully matched David Li". A command input field says "Enter command here..." with a send button.

After (when `filter g/F` is executed):



## Clearing all entries: `clear`

Clears all entries of tutors/students from CLITutors.

**Caution:** Clearing the student list will clear the match list as well due to student being deleted.

Format:

```
clear t  
clear s
```

▼ Expected outcome:

Command Executed: `clear t`

Before:

CLITutors

File Help

**Tutors**

- 1. Alex Yeoh**  
Subjects:  
**PriMath**  
Contact: 87438807  
Gender: M  
Qualification: Pre-University  
Remark: Prefers tutoring in the East
- 2. Bernice Yu**  
Subjects:  
**SecChem SecPhy**  
Contact: 99272758  
Gender: F  
Qualification: University
- 3. Charlotte Oliveira**  
Subjects:  
**TerEcon TerLit**

**Students**

- 1. David Li**  
Subjects:  
**PriMath**  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
**SecChem**  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
**TerBio TerGeog**  
Contact: 92624417  
Gender: M

**Match List**

Enter command here... ➤

After:

CLITutors

File Help

**Tutors**

Tutor data has been cleared!

**Students**

- 1. David Li**  
Subjects:  
**PriMath**  
Contact: 91031282  
Gender: M  
Remark: Wants experienced tutor
- 2. Irfan Ibrahim**  
Subjects:  
**SecChem**  
Contact: 92492021  
Gender: M
- 3. Roy Balakrishnan**  
Subjects:  
**TerBio TerGeog**  
Contact: 92624417  
Gender: M

**Match List**

Enter command here... ➤

## Exiting the program: `exit`

Exits the CLiTutors application.

Format:

`exit`

## Saving the data

`CliTutors` data is saved in the hard disk automatically after any command that changes the data. There is no need to save manually.

## Editing the data file

`CliTutors` data is saved as a JSON file `[JAR file location]/data/clitutors.json`. Advanced users are welcome to update the data directly by editing that data file.

**!** **Caution:** If the data file's format is invalid after manual changes, `CliTutors` will discard all data and start with an empty data file at the next run.

## FAQ

**Q:** How do I transfer my data to another computer?

**A:** Install the application on the other computer and place your current data folder in the same directory as the newly installed application (overwrite the data folder of the new application if applicable).

**Q:** Where is the data of CLiTutors saved?

**A:** CLiTutors' data is saved automatically after every command into a JSON file named `clitutors.json`. This file is stored within the data folder in the same location as the application JAR file and is created after the initial launch (and upon a command execution) of a fresh installation.

# Command Summary

Action	Format, Examples
Add	<pre>add t n/NAME p/PHONE_NUMBER g/GENDER q/QUALIFICATION [r/REMARK] t/TAG... add s n/NAME p/PHONE_NUMBER g/GENDER [r/REMARK] t/TAG... e.g. add t n/John Doe p/98765432 g/M q/3 r/Prefers students in Bishan t/PM</pre>
Delete	<pre>delete t INDEX delete s INDEX e.g. delete s 3</pre>
Help	<pre>help</pre>
Edit	<pre>edit t INDEX [n/NAME] [p/PHONE_NUMBER] [g/GENDER] [q/QUALIFICATION] [r/REMARK] [t/TAG...] edit s INDEX [n/NAME] [p/PHONE_NUMBER] [g/GENDER] [r/REMARK] [t/TAG...] e.g. edit t 2 n/John Doe q/1</pre>
List	<pre>list t list s</pre>
Find	<pre>find t [n/NAME] [g/GENDER] [q/QUALIFICATION] [t/TAG...] find s [n/NAME] [g/GENDER] [t/TAG...] e.g. find s n/John</pre>
Match	<pre>match INDEX e.g. match 1</pre>
Filter	<pre>filter [n/NAME] [g/GENDER] [q/QUALIFICATION] e.g. filter g/F</pre>
Clear	<pre>clear t clear s</pre>
Exit	<pre>exit</pre>

# Appendix

## Valid Tags

**Tag** can be read as [LEVEL][SUBJECT] e.g. **PM** is Primary Math.  
The application supports the following levels of education and subjects as shown in the table below.

Education Level	Subjects	Tag
Primary	English	<b>PE</b>
	Math	<b>PM</b>
	Science	<b>PS</b>
	Biology	<b>SB</b>
Secondary	Chemistry	<b>SC</b>
	English	<b>SE</b>
	Geography	<b>SG</b>
	History	<b>SH</b>
Tertiary	Literature	<b>SL</b>
	Math	<b>SM</b>
	Physics	<b>SP</b>
	Biology	<b>TB</b>
	Chemistry	<b>TC</b>
	Economics	<b>TE</b>
	Geography	<b>TG</b>
	History	<b>TH</b>

Education Level	Subjects	Tag
	Literature	TL
	Math	TM
	Physics	TP

 **Note:** Tags are case-insensitive.

## Valid Qualifications

Here are the possible categories of qualifications for tutors:

- Qualifications
  - 0 : Pre-University
  - 1 : University Student
  - 2 : Graduate
  - 3 : MOE-Trained