Exercise

Implement a console-based social networking application (similar to <u>Twitter</u>) satisfying the scenarios below.

Scenarios

Posting: Alice can publish messages to a personal timeline

```
> Alice -> I love the weather today
```

> Bob -> Damn! We lost!

> Bob -> Good game though.

Reading: Bob can view Alice's timeline

```
> Alice
```

I love the weather today (5 minutes ago)

> Bob

Good game though. (1 minute ago) Damn! We lost! (2 minutes ago)

Following: Charlie can subscribe to Alice's and Bob's timelines, and view an aggregated list of all subscriptions

```
> Charlie -> I'm in New York today! Anyone want to have a coffee?
```

> Charlie follows Alice

> Charlie wall

Charlie - I'm in New York today! Anyone want to have a coffee? (2 seconds ago)

Alice - I love the weather today (5 minutes ago)

```
> Charlie follows Bob
```

> Charlie wall

Charlie - I'm in New York today! Anyone wants to have a coffee? (15 seconds ago)

```
Bob - Good game though. (1 minute ago)
Bob - Damn! We lost! (2 minutes ago)
Alice - I love the weather today (5 minutes ago)
```

Details

- The application must use the console for input and output.
- Users submit commands to the application. There are four commands. "posting", "reading", etc. are not part of the commands; commands always start with the user's name.

```
o posting: <user name> -> <message>
o reading: <user name>
o following: <user name> follows <another user>
o wall: <user name> wall
```

- Don't worry about handling any exceptions or invalid commands. Assume that the user will always type the correct commands. Just focus on the sunny day scenarios.
- Don't bother making it work over a network or across processes. It can all be done in memory, assuming that users will all use the same terminal.
- Non-existing users should be created as they post their first message. Application should not start with a predefined list of users.
- Use whichever language, libraries, frameworks and tools you like.
- Provide instructions on how to run the application.

IMPORTANT: Focus on writing the best code you can produce. Do not rush. Take as much time as you need; there is no deadline.

Code Submission

Push the code to your own GitHub account, as a public project, and send us the link.