Manage those phone books!

Other [Fridays at Hacker School](#)

Build a command line tool that manages phone books, via the interface below.

Things that should work:

```
$ phonebook create hsphonebook.pb
```

or

```
$ python phonebook.py create hsphonebook.pb
created phonebook hsphonebook.pb in the current directory


$ phonebook lookup Sarah -b hsphonebook.pb # error message on no such phonebook
Sarah Ahmed 432 123 4321
Sarah Apple 509 123 4567
Sarah Orange 123 456 7890


$ phonebook add 'John Michael' '123 456 4323' -b hsphonebook.pb # error message on duplicate na
me


$ phonebook change 'John Michael' '234 521 2332' -b hsphonebook.pb # error message on not exist


$ phonebook remove 'John Michael' -b hsphonebook.pb # error message on not exist


$ phonebook reverse-lookup '312 432 5432'
```

You should also write tests. (<--- this is important, it's half of the assignment!)

Several Hacker Schoolers have asked for more accountability about these projects - so let me know if you're doing this project so I can hold you to it. This is a knowing-your-language type exercise, similar to one you might get from a company as a coding challenge in lieu of a phone screen. Try to do it as quickly and as well as you can. Send tom@hackerschool.com a link when you finish for a code review. (shouldn't take more than a day or two, but feel free to send it to me anytime) Use whatever libraries you like - it might be quickest and easiest not to use any.

Optional extra tasks when you're done:

1. make lookup the default command
2. allow search by partial name - not just beginning of name
3. allow `-b phonebook.rb` to occur anywhere in command
4. case insensitive search
5. make names work without using quotes
6. add a config file where you can specify a default phone book to use. Add commands to edit this file without having to edit it manually
7. implement a sql database backend if you didn't already
8. implement a http backend (`phonebook lookup Tom -b ' http://mywebsite/phonebook '` etc.)
9. Add tab completion

    Footnote: How to make your program run from the command line if you write it in a scripting language (Python, JavaScript, Ruby)
This isn't a priority or required for anything - it's just that many people have asked.

1. Add a hashbang line to your file, like `#!/usr/bin/env python` or `#!/usr/bin/env ruby`
2. Change the unix permissions of your file to executable with `chmod u+x your_script.pyrbjs`
3. Add your script to a directory in your PATH (`echo $PATH` to see a list of directories - put your script or a link to your script in one of these directories)

Creating an executable file in Java: http://www.skylit.com/javamethods/faqs/createjar.html