

Lab: getopts

At this point we can find customers, delete customers, and update customers. Only one thing left. We need to be able to add customers. In this lab we're going to write the ability to add customers with a command like this:

```
AddCustomer.bash -f Barry -l Allen -a "1940 Fox Way" -c "Central City"
-s "MO" -z 64801 -e ballen@starlabs.com
```

Let's get started!

customerFunctions.bash

1. Edit customerFunctions.bash. Find your addCustomer function.
2. Make it receive all the parameters needed to create a new customer like (given name, family name, street address, city, phone, email, etc.). You can receive these values in any order you choose as long as you're consistent.
3. Use your generateCustomerId function we created in the ??? lab to get an unused ID.
4. Take the next customer Id and all eight parameters and concatenate them using pipes ("|") to separate the fields.
5. Append them all to the Customers.txt file.
6. Run and test it by supplying values for each parameter. Make sure it is adding them properly to your Customers.txt file/table/database.

AddCustomer.bash.

7. Great, we have a function to add customers but we need a script to call that function.
8. Create AddCustomer.bash.
9. This script is simple. It will only gather the new customer values needed and execute your function.
10. Use the getopts command to process your options. Here are some guidelines to keep in mind as you craft your getopts command:
 - put getopts behind a while loop so it processes all your options. Kind of like this: "while getopts ..."
 - list your allowable options -- p for phone number, s for street address, e for email and so forth. You get to choose which letters are used.
 - Put colons behind all of the option letters that have arguments. (Hint: you probably want all of your options to require arguments)
 - Inside the getopts loop, you'll want to process the current option and the current argument.
 - The current argument will be stored in \$OPTARG.

11. Once you've processed all the arguments, put this line after your loop to eliminate your options.
12. `shift $((OPTIND - 1))`
13. Run and test. You should be able to provide options to customize values to be inserted and you can provide them in any order you like.

Once you can add new users, you can be finished.