

Course: CS362
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Random Testing Quiz

Git URL:

<https://github.com/aslivka/CS362-004-F2018/tree/slivkaa-random-quiz/projects/slivkaa/quiz>

Development

inputChar()

After examining testme.c code, inputChar() has to return a random character to testme() function. Function testme() expects the following characters in order from inputChar(): "[({ ax})]". First, I defined a hardcoded string, keyList, in inputChar() that held these wanted characters and b-z also.

```
char keyList[] = " [({})abcdefghijklmnopqrstuvwxyz";
```

Next, the function generated a random integer using rand() in the valid index range of keyList string (0 to string length of KeyList -1). Finally, it returned the character at random index of keyList string back to testme(). After including additional characters(b-z) in string, the program runtime didn't increase by much. An average run takes 1-3 seconds, with 7,000 iterations.

inputString()

A similar process was followed for the inputString() function. First, I defined a string of search characters, searchStr, with contents: "resetRESET". To lengthen program runtime a little, extra invalid characters were added to it: "RESET". After that, a loop ran which selected 5 random characters from the searchStr and assigned them to return string, randStr. After randStr was filled up, it was returned to testme() for verification.

To run program with makefile: enter "make".

In my experience, the entire program usually runs for only about 2-3 seconds, with 5,000-30,000 runs total.