

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

My main rule for developing both the **inputChar()** and **inputString()** generator functions was to follow expected input. If **inputChar** was expected to produce certain characters, I made sure the valid characters were part of random set of characters returned by the function.

##### **inputChar()**

After examining **testme()** function, **inputChar()** was supposed to return the following characters in order, one char per function call: “[{ ax}]”. Therefore, inside **inputChar()**, I created a string that only held the expected characters and then randomly selected one element from this string to return back to **testme()** for every call of **inputChar()**. By limiting my string to only valid or expected characters, the runtime of the program was shortened drastically.

##### **inputString()**

A similar process was followed for the **inputString()** function. First, I defined a string of search characters, **searchStr**, with contents: “resetRST”. To lengthen program runtime a little, extra invalid characters were added to it: “RST”. 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 2-5 seconds, with 1000-5000 runs total.