CS362 – Software Engineering II
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Random Testing Quiz

Random Testing Quiz Files are located at:
https://github.com/liureOSU/CS362-004-W2018/tree/liure-random-quiz/projects/liure/quiz

Execute: Use the command ‘make’ to create the executable as well as execute it.

Development:

srand(seed) is called to set a random seed which is different based on the CPU clock time. This is used to generate pseudorandom numbers with the rand() command.

For inputChar(), (rand() + 1 % 10) was used to find a number between one and ten. Then, each of these ten options is set to one of the characters which advances the **state** variable. These include [,], {, }, ‘ ‘, a, x, etc.

For inputString(), a 5 character string is initially defined to be returned from the function. Then, five random numbers were found between the range of 1 and 4. These are set to the following characters: 1 = ‘r’, 2 = ‘e’, 3 = ‘s’ and 4 = ‘t’. The fifth character in the string is set to ‘/0’. For each of the first four characters, a RNG number sets the character within that character.

An example output from inputString() would be ‘eestr’ or ‘reset’.

inputChar() quickly advances state from 1 to 9 by randomly generating a different character for each iteration of the while loop in testme(). The inputString() function works a bit slower to create the string ‘reset’ which activates the error message and exit statement.

Since the character set for each function is small, the program executes quickly.