

Random Testing Quiz

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In order to hit the error message in the *testme()* function, there are two steps. The first step is to make the “state” equal to 9. Since the variable “state” start from 0, the variable “c” must go through character "[", " (", "{", "a", "x", "}", ")", "]" in order. The variable “c” is generated by function *inputChar()*, so I created an array string in function *inputChar()*, and it will return one random character from "[", " (", "{", "a", "x", "}", ")", "]" each time when calling it. After iterations, the variable “state” will definitely become 9. The second step is to make the string “s” equal to “reset\0”. The string “s” is the return value of function *inputString()*. In order to achieve this goal, I make the for loop in function *inputString()* to generate a random string consisting of random characters from “reset” and add “\0” at the end of string. After iterations, it will definitely return a string “reset\0”. Finally, I run my program a few times and find it can hit error message after hundreds or thousands of iterations.