

Random Testing (RT) Quiz

The interface we're testing is a function call **testme()**. The code is expected to handle 2 types of input: char and string. An important thought is reducing the probability space to where the error can occur within 5 minutes (as required by the quiz).

So I thought about preconditions **testme()** needs. It first checks for a character, **c**, that can be any of the Ascii character. I chose all symbols (32 to 126 in Ascii). As for the string, the error will be the word "reset" with null terminator at the end. In interest of time, I opted to have a fixed string length of 5. To fill this string with chars, I focused on just small alphabets (97 to 122 in Ascii). These inputs seem primed to find the error. Obviously, in real life, knowing where the error will occur won't be so easily written. I would probably have made my string size be from 1 to string limit of 509 in C-89 convention. That could also change depending on the C version one would use.

It's safe to say we achieved coverage once the error is caught. Refer to following instance:

```
Iteration 3386199: c = {, s = wcnfz, state = 9
Iteration 3386200: c = 5, s = agirs, state = 9
Iteration 3386201: c = h, s = syjq, state = 9
Iteration 3386202: c = &, s = fbnex, state = 9
Iteration 3386203: c = l, s = dwtig, state = 9
Iteration 3386204: c = /, s = pscos, state = 9
Iteration 3386205: c = +, s = ohmpp, state = 9
Iteration 3386206: c = a, s = vxoo, state = 9
Iteration 3386207: c = ?, s = xmopb, state = 9
Iteration 3386208: c = G, s = ktgbv, state = 9
Iteration 3386209: c = *, s = nqfgs, state = 9
Iteration 3386210: c = B, s = ejwsj, state = 9
Iteration 3386211: c = %, s = cvkhu, state = 9
Iteration 3386212: c = (, s = qlbx, state = 9
Iteration 3386213: c = S, s = sraeh, state = 9
Iteration 3386214: c = ;, s = zfsqv, state = 9
Iteration 3386215: c = *, s = asrem, state = 9
Iteration 3386216: c = l, s = rrmsb, state = 9
Iteration 3386217: c = ", s = nkdej, state = 9
Iteration 3386218: c = ., s = lrvjs, state = 9
Iteration 3386219: c = e, s = lscku, state = 9
Iteration 3386220: c = K, s = uhkqw, state = 9
Iteration 3386221: c = i, s = kuqgw, state = 9
Iteration 3386222: c = Q, s = mpumn, state = 9
Iteration 3386223: c = ), s = lfxdp, state = 9
Iteration 3386224: c = }, s = levzs, state = 9
Iteration 3386225: c = ^, s = fwikq, state = 9
Iteration 3386226: c = k, s = myvsk, state = 9
Iteration 3386227: c = v, s = khzgm, state = 9
Iteration 3386228: c = <, s = jgwww, state = 9
Iteration 3386229: c = h, s = fvuli, state = 9
Iteration 3386230: c = 7, s = gkfvp, state = 9
Iteration 3386231: c = 1, s = reset, state = 9
error make: *** [all] Error 200
Ashrafs-MacBook:Week 5 ashrafezani$
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