

Homework Number: hw10

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Due Date: Thursday 4/09/2020 at 4:29PM

1. specially crafted buffer overflow string:

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA\xc8\x0d\x40\x00\x00\x00\x00

2. explanation of why you chose the string:

- address of variable str in clientComm(): 0x7ffffffe42b
- return address of clientComm(): 0x7ffffffe448
- entry to the object code for the secretFunction() function:
0x00000000400dc8
- difference between address of variable str and return address of
clientComm(): $0x7ffffffe448 - 0x7ffffffe42b = 29$
- Therefore, the specially crafted buffer overflow string is 29*A concatenated
with the entry to the object code for the secretFunction() function.

3. explanation of your fixes to the code: when the number of characters inputted by client is larger than MAX_DATA_SIZE, let the server send string "less" to client and prevent the server from using strcpy().

4. the modified parts of the server code by highlighting or underlining them: as the following page, the modified part is highlighted in pink.