

## Lecture 7 Worksheet

First, circle the line below that is problematic. Why is it problematic?

```
// first argument is the name, second is the password
int main(int argc, char *argv[]) {
    char secret[4] = "123";
    // assume secret comes right after name in memory
    // (this is not always true)
    char name[4];
    strcpy(name, argv[1]);

    if (strcmp(secret, argv[2]) == 0) {
        printf("You're in!\n");
    }
    return 0;
}
```

Next, which of the options will print “You’re in!”? We are assuming **secret** comes right after **name** in memory (not always true) – so as soon as we go past the end of name, we will be in the memory for secret.

- A. ./buf abcdefg efg
- B. ./buf abcd abcd
- C. ./buf a a
- D. ./buf abcdefgh abcd

<i>name</i>				<i>secret</i>			
?	?	?	?	'1'	'2'	'3'	'\0'

*Hint: pretend you are **strcpy** and **strcmp**. Write in the characters above that are copied in and determine what characters strcmp would compare.*