

CSE 484 In-Class Worksheet #3 – Fall 2017

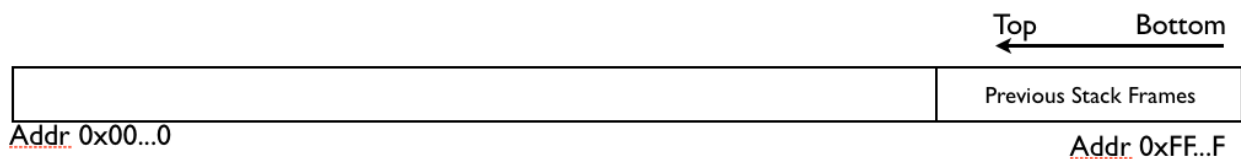
Name: _____ UW Student #: _____ Date: _____

Email address: _____

Partner names for this activity: _____

Q1: In the figure below, draw what happens on the stack (x86) when this function is called. What might get overwritten if str is longer than 126 bytes?

```
void func(char *str) {  
    char buf[126];  
    strcpy(buf,str);  
}
```



Q2: Apache 1.3 had the following code:

```
strcpy(record,user);  
strcat(record,":");  
strcat(record,cpw);
```

The published fix:

```
strncpy(record,user,MAX_STRING_LEN-1);  
strcat(record,":");  
strncat(record,cpw,MAX_STRING_LEN-1);
```

Is this fix good? If so, why? If not, why not?

Q3: Consider this code:

```
void mycopy(char *input) {
    char buffer[512]; int i;

    for (i=0; i<=512; i++)
        buffer[i] = input[i];
}
void main(int argc, char *argv[]) {
    if (argc==2)
        mycopy(argv[1]);
}
```

Is this code exploitable? If not, why not? If so, why? You may use the diagram below to help answer this question, if you wish.

