

BUFFERING: THE SILENT KILLER

Jonathan Misurda
jmisurda@cs.pitt.edu

A Mystery

```
#include <stdio.h>

int main()
{
    char a[10];
    char b;

    scanf("%s", a);
    printf("a is %s\n", a);
    b = getchar();
    printf("b is %c\n", b);

    return 0;
}
```

Output

```
(16) thot $ ./a.out
the
a is the
b is

(17) thot $
```

Mystery 2

```
#include <stdio.h>

int main()
{
    printf("hello world");
    for(;;) ;

    return 0;
}
```

Output

```
(20) thot $ ./a.out

(21) thot $
```

BUFFERING!

fflush()

```
#include <stdio.h>

int main()
{
    printf("hello world");
    fflush(stdout);
    for(;;) ;

    return 0;
}
```

Output

```
(24) thot $ ./a.out
hello world
(25) thot $
```