

```
1.  /*****
2.   * scanf1.c
3.   *
4.   * David J. Malan
5.   * malan@harvard.edu
6.   *
7.   * Reads a number from the user into an int.
8.   *
9.   * Demonstrates scanf and address-of operator.
10.  *****/
11.
12.  #include <stdio.h>
13.
14.  int main(void)
15.  {
16.      int x;
17.      printf("Number please: ");
18.      scanf("%d", &x);
19.      printf("Thanks for the %d!\n", x);
20.      return 0;
21.  }
```

```
1.  /*****
2.   * scanf2.c
3.   *
4.   * David J. Malan
5.   * malan@harvard.edu
6.   *
7.   * Reads a string from the user into memory it shouldn't.
8.   *
9.   * Demonstrates possible attack!
10.  *****/
11.
12. #include <stdio.h>
13.
14. int main(void)
15. {
16.     char* buffer;
17.     printf("String please: ");
18.     scanf("%s", buffer);
19.     printf("Thanks for the \"%s\"!\n", buffer);
20.     return 0;
21. }
```

```
1.  /*****
2.   * scanf3.c
3.   *
4.   * David J. Malan
5.   * malan@harvard.edu
6.   *
7.   * Reads a string from the user into an array (dangerously).
8.   *
9.   * Demonstrates potential buffer overflow!
10.  *****/
11.
12.  #include <stdio.h>
13.
14.  int main(void)
15.  {
16.      char buffer[16];
17.      printf("String please: ");
18.      scanf("%s", buffer);
19.      printf("Thanks for the \"%s\"!\n", buffer);
20.      return 0;
21.  }
```