

```

/*****
 * print: Prints a listing of all parts in the database,
 *        showing the part number, part name, and
 *        quantity on hand. Parts are printed in the
 *        order in which they were entered into the
 *        database.
 *****/
void print(void)
{
    int i;

    printf("Part Number    Part Name\n");
    printf("Quantity on Hand\n");
    for (i = 0; i < num_parts; i++)
        printf("%7d %-25s%11d\n", inventory[i].number,
               inventory[i].name, inventory[i].on_hand);
}

```

In the main function, the format string " %c" allows `scanf` to skip over white space before reading the operation code. The space in the format string is crucial; without it, `scanf` would sometimes read the new-line character that terminated a previous line of input.

The program contains one function, `find_part`, that isn't called from main. This "helper" function helps us avoid redundant code and simplify the more important functions. By calling `find_part`, the `insert`, `search`, and `update` functions can locate a part in the database (or simply determine if the part exists).

There's just one detail left: the `read_line` function, which the program uses to read the part name. Section 13.3 discussed the issues that are involved in writing such a function. Unfortunately, the version of `read_line` in that section won't work properly in the current program. Consider what happens when the user inserts a part:

```

Enter part number: 528
Enter part name: Disk drive

```

The user presses the Enter key after entering the part number and again after entering the part name, each time leaving an invisible new-line character that the program must read. For the sake of discussion, let's pretend that these characters are visible:

```

Enter part number: 528␣
Enter part name: Disk drive␣

```

When we call `scanf` to read the part number, it consumes the 5, 2, and 8, but leaves the `␣` character unread. If we try to read the part name using our original `read_line` function, it will encounter the `␣` character immediately and stop reading. This problem is common when numerical input is followed by character input. Our solution will be to write a version of `read_line` that skips white-