

```

#define NAME_LEN 25

struct part {
    int number;
    char name[NAME_LEN+1];
    int on_hand;
    struct part *next;
};

struct part *inventory = NULL;    /* points to first part */

struct part *find_part(int number);
void insert(void);
void search(void);
void update(void);
void print(void);

/*****
 * main: Prompts the user to enter an operation code,
 *       then calls a function to perform the requested
 *       action. Repeats until the user enters the
 *       command 'q'. Prints an error message if the user
 *       enters an illegal code.
 *****/
int main(void)
{
    char code;

    for (;;) {
        printf("Enter operation code: ");
        scanf(" %c", &code);
        while (getchar() != '\n')    /* skips to end of line */
            ;
        switch (code) {
            case 'i': insert();
                       break;
            case 's': search();
                       break;
            case 'u': update();
                       break;
            case 'p': print();
                       break;
            case 'q': return 0;
            default: printf("Illegal code\n");
        }
        printf("\n");
    }
}

/*****
 * find_part: Looks up a part number in the inventory
 *            list. Returns a pointer to the node
 *            containing the part number; if the part
 *            number is not found, returns NULL.
 *****/

```