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#include <stdio.h>
#include <string.h>

struct item {
    char barcode[6];
    const char *name;
    float price;
};

// function prototype
float items_sum( struct item *items, size_t n );

// initialise a structure with values
// pass in the memory address of structure
// Warning: assume name has preallocated memory
void item_init( struct item *item,
    const char *barcode, const char *name, float price) {

    if (item == NULL ||
        barcode == NULL ||
        name == NULL)
        return; // raise an error?

    strncpy(item->barcode, barcode, 6);
    item->name = name; // warning
    item->price = price;
}

int main() {
    // create array
    struct item items[2];

    // initialise elements
    item_init( &(items[0]), "DFH291", "Big tuna", 1.25);
    item_init( &(items[1]), "FGD135", "Tin can", 3.50);

    float sum = items_sum(items, 2);
    printf("sum: %.2f\n", sum);

    return 0;
}

```

```
// sum all prices
float items_sum( struct item *items, size_t n ) {
    float sum = 0;

    int i = 0;
    for ( ; i < n; ++i) {
        sum += items[i].price;
    }
    return sum;
}
```