

Arrays of Structures

- ◆ The converse of a structure with arrays:

- ◆ Example:

```
struct entry {  
    char fname [10] ;  
    char lname [12] ;  
    char phone [8] ;  
};  
struct entry list [1000];
```

- ◆ This creates a list of 1000 identical entry(s).

- ◆ Assignments:

```
list [1] = list [6];  
strcpy (list[1].phone, list[6].phone);  
list[6].phone[1] = list[3].phone[4] ;
```

An Example

```
#include <stdio.h>

struct entry {
    char fname [20];
    char lname [20];
    char phone [10];
};
```

```
int main() {
    struct entry list[4];
    int i;
    for (i=0; i < 4; i++) {
        printf ("\nEnter first name: ");
        scanf ("%s", list[i].fname);
        printf ("Enter last name: ");
        scanf ("%s", list[i].lname);
        printf ("Enter phone in 123-4567 format: ");
        scanf ("%s", list[i].phone);
    }
    printf ("\n\n");
    for (i=0; i < 4; i++) {
        printf ("Name: %s %s", list[i].fname, list[i].lname);
        printf ("\t\tPhone: %s\n", list[i].phone);
    }
}
```