∴ The original matrix a has been transposed in-place □

The matrix transpose function using dynamically allocated arrays has the exact same function body.

## 2.3 Structures and Unions

### 2.3.1 Structures

- A structure (called a record in many other programming languages) is a collection of data items, where each item is identified as to its type and name. The data can vary in type.
- Ex: struct { char name[10]; int age; float salary; } person;

creates a variable whose name is person and that has three fields: 1) a name that is a character array 2) an integer value representing the age of the person 3) a float value representing the salary of the individual.

#### Assigning values

1) strcpy(person.name, "james"); 2) person.age = 10; 3) person.salary = 35000;

The . is the structure member operator. We use this operator to select a particular member of the structure.

We can create our own structure data types by using the typedef statement