

Exercise : cell array

Suppose you want to create a 2×2 cell array **A**, whose cells contain the location, the date, the air temperature (measured at 8 A.M., 12 noon, and 5 P.M.), and the water temperatures measured at the same time in three different points in a pond. The cell array looks like the following.

| Walden Pond | June 13, 1997 |
|-------------|--|
| [60 72 65] | $\begin{bmatrix} 55 & 57 & 56 \\ 54 & 56 & 55 \\ 52 & 55 & 53 \end{bmatrix}$ |

Exercise: structure

Ex 1.

```
% change the value of the structure using field name
clear student      % clear student
student(1) = struct('name', 'Banny', 'scores', [85,80,92,78]);
student(2) = struct('name', 'Joey', 'scores', [80,85,90,88]);
student(3) = struct('name', 'Betty', 'scores', [88,82,90,80]);
```

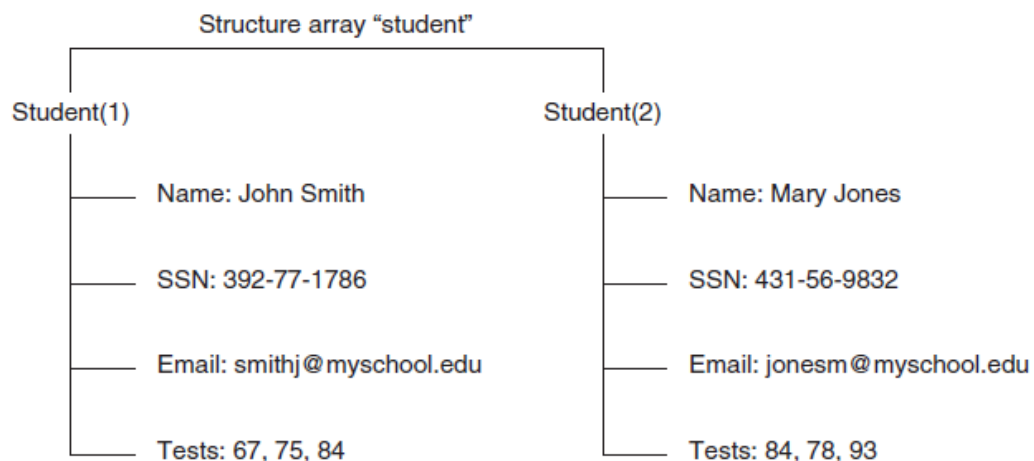
(a) get the values of the scores of every students

(b) Calculate the average score of each student by

Average score=0.2*score1+0.2*score2+0.3*score3+0.3*score4

(c) Add a field name 'avg' for the Average score of the student.

EX 2: Create a structure "student " with the field name and the data as follows:



Ex3:

Create a structure array that contains the following information fields concerning the road bridges in a town: bridge location, maximum load (tons), year built, year due for maintenance. Then enter the following data into the array:

| Location | Max. load | Year built | Due for maintenance |
|-----------|-----------|------------|---------------------|
| Smith St. | 80 | 1928 | 2011 |
| Hope Ave. | 90 | 1950 | 2013 |
| Clark St. | 85 | 1933 | 2012 |
| North Rd. | 100 | 1960 | 2012 |

Edit the structure array created in Problem 48 to change the maintenance data for the Clark St. bridge from 2012 to 2018.

Add the following bridge to the structure array created in Problem 48.

| Location | Max. load | Year built | Due for maintenance |
|-----------|-----------|------------|---------------------|
| Shore Rd. | 85 | 1997 | 2014 |