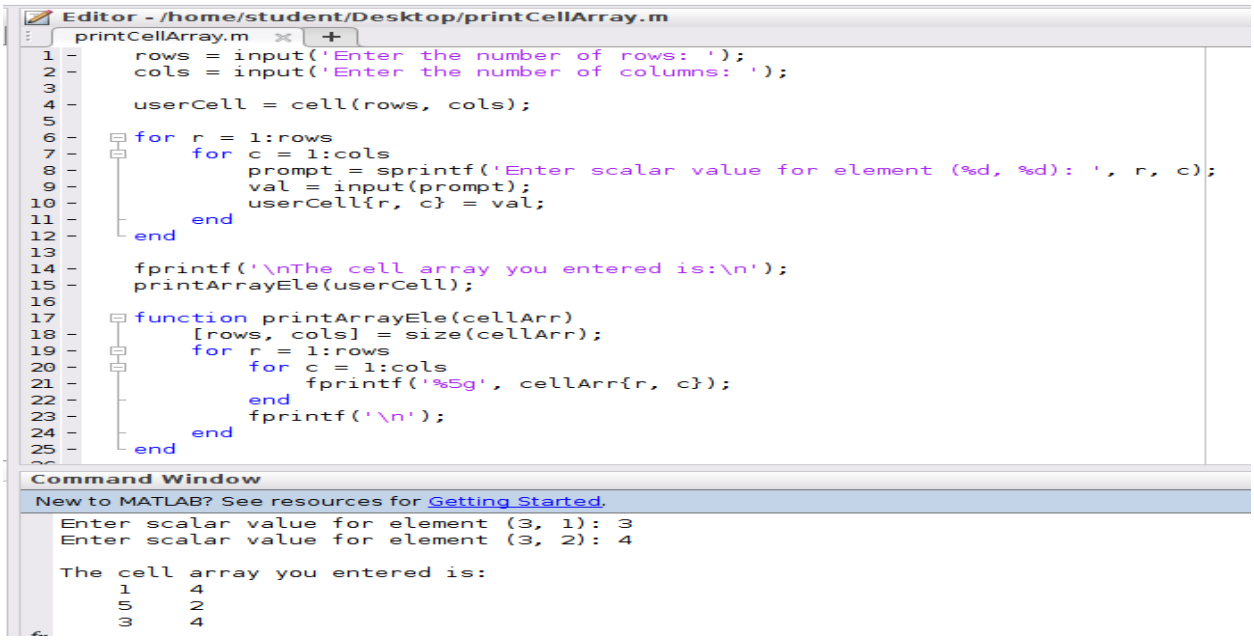
ASSIGNMENT: 6

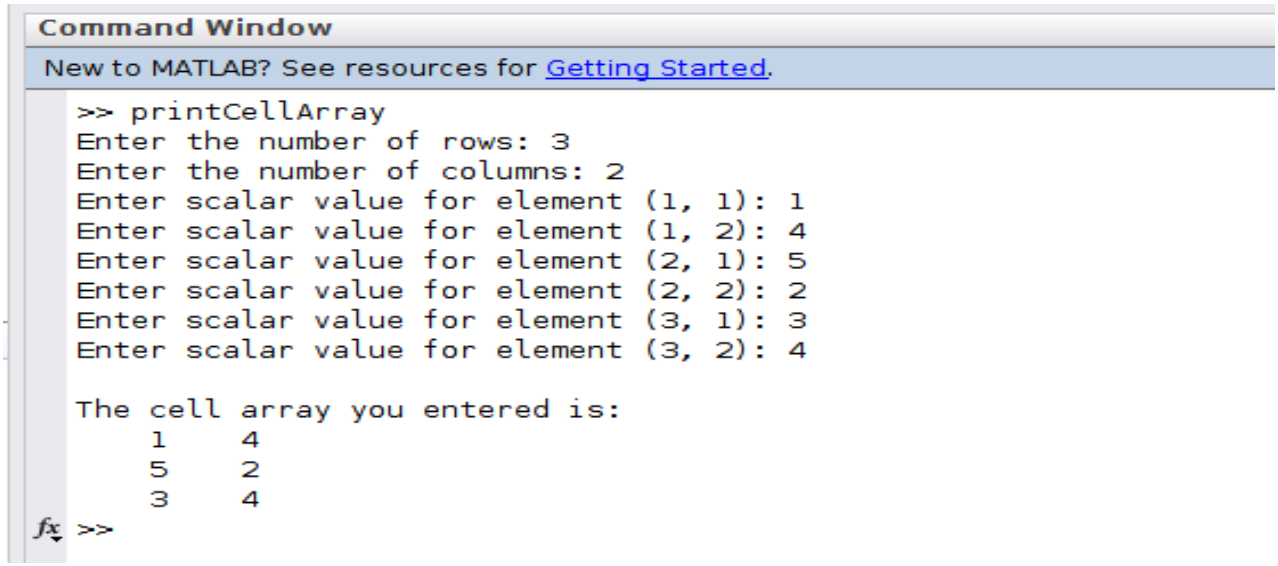
1. Write a user-defined function in MATLAB, named printCellArray that takes a 2-D cell array and displays the data in each container. You may assume that the cell array contains only scalar data (no array, structure, structure array, cell, or cell array). Hint MATLAB's size() function works for cell arrays. For example for the cell array {10 37; 12 8; 2 46} should be displayed as shown below,
    1. 10 37
    2. 12 8
    3. 2 46



```
Editor - /home/student/Desktop/printCellArray.m
printCellArray.m
 1 -     rows = input('Enter the number of rows: ');
 2 -     cols = input('Enter the number of columns: ');
 3
 4 -     userCell = cell(rows, cols);
 5
 6 -   for r = 1:rows
 7 -       for c = 1:cols
 8 -           prompt = sprintf('Enter scalar value for element (%d, %d): ', r, c);
 9 -           val = input(prompt);
10 -           userCell{r, c} = val;
11 -       end
12 -   end
13
14 -    fprintf('\nThe cell array you entered is:\n');
15 -    printArrayEle(userCell);
16
17    function printArrayEle(cellArr)
18 -       [rows, cols] = size(cellArr);
19 -       for r = 1:rows
20 -           for c = 1:cols
21 -               fprintf('%5g', cellArr{r, c});
22 -           end
23 -           fprintf('\n');
24 -       end
25 -   end
Command Window
New to MATLAB? See resources for Getting Started.
Enter scalar value for element (3, 1): 3
Enter scalar value for element (3, 2): 4

The cell array you entered is:
     1     4
     5     2
     3     4
```

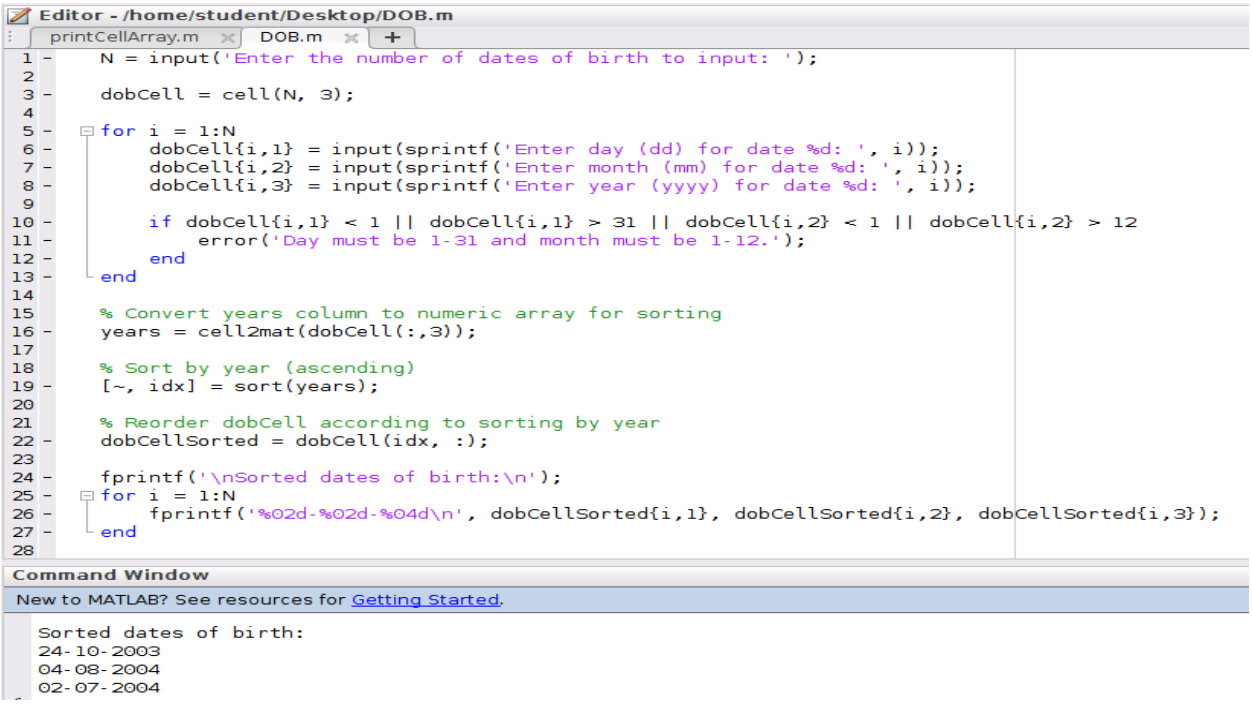
Output:



```
Command Window
New to MATLAB? See resources for Getting Started.
>> printCellArray
Enter the number of rows: 3
Enter the number of columns: 2
Enter scalar value for element (1, 1): 1
Enter scalar value for element (1, 2): 4
Enter scalar value for element (2, 1): 5
Enter scalar value for element (2, 2): 2
Enter scalar value for element (3, 1): 3
Enter scalar value for element (3, 2): 4

The cell array you entered is:
     1     4
     5     2
     3     4
fx >>
```

2. Write a MATLAB script-file to read date of birth (dd, mm and yyyy separately) from user and store in a cell array. The cell array should be arranged as an Nx3 cell array where column one holds the day (dd), column two holds the month (mm) and column three holds the year (yyyy). Finally, sort the newly created cell array in ascending order of year and print it on screen. The output should be as shown in the following example,
   A. 20-05-1995
   B. 16-08-1997
   C. 12-12-2000
   D. 06-01-2010



Output: