```
/*-----------------------------
// Assignment 4: Cuckoo Hashing algorithm
// Rocio Salguero
// An open addressing method called Cuckoo Hashing
// INPUT: an input file containing strings of characters, one string per line
// OUTPUT: a detailed list of where the strings are inserted.
*/
```

Input > in4.txt

Algorithm Engineering

California

State University

Fullerton

College of Engineering and Computer Science

Department of Computer Science

Dynamic Programming

Monge Properties

String Matching

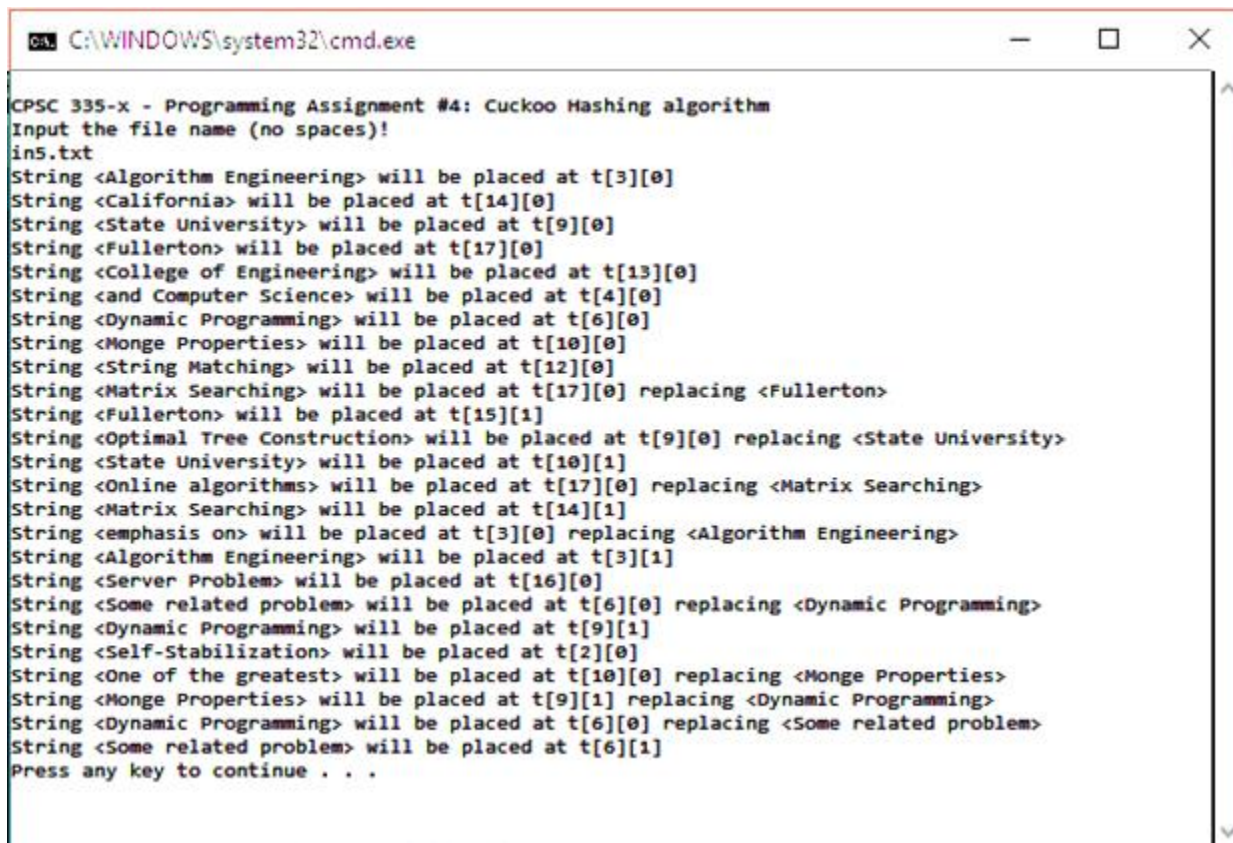Matrix Searching

Optimal Tree Construction

Output <


```
C:\WINDOWS\system32\cmd.exe                                            —   □   ×

CPSC 335-x - Programming Assignment #4: Cuckoo Hashing algorithm
Input the file name (no spaces)!
in4.txt
String <Algorithm Engineering> will be placed at t[3][0]
String <California> will be placed at t[14][0]
String <State University> will be placed at t[9][0]
String <Fullerton> will be placed at t[17][0]
String <College of Engineering and Computer Science> will be placed at t[3][0] replacing <Algorithm Engineering>
String <Algorithm Engineering> will be placed at t[3][1]
String <Department of Computer Science> will be placed at t[17][0] replacing <Fullerton>
String <Fullerton> will be placed at t[15][1]
String <Dynamic Programming> will be placed at t[6][0]
String <Monge Properties> will be placed at t[10][0]
String <String Matching> will be placed at t[12][0]
String <Matrix Searching> will be placed at t[17][0] replacing <Department of Computer Science>
String <Department of Computer Science> will be placed at t[7][1]
String <Optimal Tree Construction> will be placed at t[9][0] replacing <State University>
String <State University> will be placed at t[10][1]
Press any key to continue . . .
```

Input > in5.txt

Algorithm Engineering
California
State University
Fullerton
College of Engineering
and Computer Science
Dynamic Programming
Monge Properties
String Matching
Matrix Searching
Optimal Tree Construction
Online algorithms
emphasis on
Server Problem
Some related problem
Self-Stabilization
Output <

```
C:\WINDOWS\system32\cmd.exe                                    —    □    ×

CPSC 335-x - Programming Assignment #4: Cuckoo Hashing algorithm
Input the file name (no spaces)!
in5.txt
String <Algorithm Engineering> will be placed at t[3][0]
String <California> will be placed at t[14][0]
String <State University> will be placed at t[9][0]
String <Fullerton> will be placed at t[17][0]
String <College of Engineering> will be placed at t[13][0]
String <and Computer Science> will be placed at t[4][0]
String <Dynamic Programming> will be placed at t[6][0]
String <Monge Properties> will be placed at t[10][0]
String <String Matching> will be placed at t[12][0]
String <Matrix Searching> will be placed at t[17][0] replacing <Fullerton>
String <Fullerton> will be placed at t[15][1]
String <Optimal Tree Construction> will be placed at t[9][0] replacing <State University>
String <State University> will be placed at t[10][1]
String <Online algorithms> will be placed at t[17][0] replacing <Matrix Searching>
String <Matrix Searching> will be placed at t[14][1]
String <emphasis on> will be placed at t[3][0] replacing <Algorithm Engineering>
String <Algorithm Engineering> will be placed at t[3][1]
String <Server Problem> will be placed at t[16][0]
String <Some related problem> will be placed at t[6][0] replacing <Dynamic Programming>
String <Dynamic Programming> will be placed at t[9][1]
String <Self-Stabilization> will be placed at t[2][0]
String <One of the greatest> will be placed at t[10][0] replacing <Monge Properties>
String <Monge Properties> will be placed at t[9][1] replacing <Dynamic Programming>
String <Dynamic Programming> will be placed at t[6][0] replacing <Some related problem>
String <Some related problem> will be placed at t[6][1]
Press any key to continue . . .
```

Input > in6.txt

Algorithm Engineering
California State University
Fullerton
College of Engineering
and Computer Science
Department of Computer
Science
Dynamic Programming
Monge Properties
String Matching
Matrix Searching
Optimal Tree Construction
Online algorithms
emphasis on
Server Problem
Some related problem
Self-Stabilization
One of the greatest
mysteries in science
Quantum Nature of Universe
In physics and
are known
Cuckoo hashing is fun

Output <

```
C:\WINDOWS\system32\cmd.exe                                              —    □    ×

CPSC 335-x - Programming Assignment #4: Cuckoo Hashing algorithm
Input the file name (no spaces)!
in6.txt
String <Algorithm Engineering> will be placed at t[3][0]
String <California State University> will be placed at t[18][0]
String <Fullerton> will be placed at t[17][0]
String <College of Engineering> will be placed at t[13][0]
String <and Computer Science> will be placed at t[4][0]
String <Department of Computer> will be placed at t[9][0]
String <Science> will be placed at t[5][0]
String <Dynamic Programming> will be placed at t[6][0]
String <Monge Properties> will be placed at t[10][0]
String <String Matching> will be placed at t[12][0]
String <Matrix Searching> will be placed at t[17][0] replacing <Fullerton>
String <Fullerton> will be placed at t[15][1]
String <Optimal Tree Construction> will be placed at t[9][0] replacing <Department of Computer>
String <Department of Computer> will be placed at t[2][1]
String <Online algorithms> will be placed at t[17][0] replacing <Matrix Searching>
String <Matrix Searching> will be placed at t[14][1]
String <emphasis on> will be placed at t[3][0] replacing <Algorithm Engineering>
String <Algorithm Engineering> will be placed at t[3][1]
String <Server Problem> will be placed at t[16][0]
String <Some related problem> will be placed at t[6][0] replacing <Dynamic Programming>
String <Dynamic Programming> will be placed at t[9][1]
String <Self-Stabilization> will be placed at t[2][0]
String <One of the greatest> will be placed at t[10][0] replacing <Monge Properties>
String <Monge Properties> will be placed at t[9][1] replacing <Dynamic Programming>
String <Dynamic Programming> will be placed at t[6][0] replacing <Some related problem>
String <Some related problem> will be placed at t[6][1]
String <mysteries in science> will be placed at t[13][0] replacing <College of Engineering>
String <College of Engineering> will be placed at t[8][1]
String <Quantum Nature of Universe> will be placed at t[12][0] replacing <String Matching>
String <String Matching> will be placed at t[11][1]
String <In physics and> will be placed at t[14][0]
String <are known> will be placed at t[18][0] replacing <California State University>
String <California State University> will be placed at t[2][1] replacing <Department of Computer>
String <Department of Computer> will be placed at t[9][0] replacing <Optimal Tree Construction>
String <Optimal Tree Construction> will be placed at t[16][1]
String <Cuckoo hashing is fun> will be placed at t[1][0]
Press any key to continue . . .
```