

# **CSE 4094 Special Topics in Computer Engineering**

## **Advanced Data Structures**

### **Project 2**

#### **Visualization of Cuckoo Hashing**

**Due: 13.06.2020 11:59PM**

The purpose of this assignment is to visualize the cuckoo hashing method using different table sizes, and different number of tables.

In this project, you will implement an application, in any programming language you like. The application will visualize the cuckoo hashing method for a given set of keys. You can check the link below for an example:

[http://www.lkozma.net/cuckoo\\_hashing\\_visualization/](http://www.lkozma.net/cuckoo_hashing_visualization/)

Your application shall be similar to the example. However, in your program the number of tables (max 5 tables) and the size of tables (min 10 / max 30 cells) will be taken as input from the user. Also, the keys to be inserted, searched, and deleted will be taken from the user as in the example. As output, different from the example, you will also include the total number of collisions and the load factor of each table after each insertion.

You will submit the source code of your program and your readme file on [ues.marmara.edu.tr](http://ues.marmara.edu.tr) service. The readme file must include detailed information on how to execute your program and the hash functions you use for each table.

This is an individual project!