

Veri Yapıları Ödev 3

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CENG 201 - Veri Yapıları

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There are 5712 lines in sozluk2.txt file. Write a C# program that uses double hashing(2 different has functions) to store elements in a hash table with size of between **11443** and **17159**. Find appropriate hash functions and table size for the problem and write the application. All items in sozluk2.txt are expected to be stored in hash table. Your program must output statistics below.

- Stored element count
- Unsuccessful to store element count
- Conflict count(once for every element)
- Maximum of steps while storing elements, $h_i(x) = (hash(x) + f(i)) \bmod TabloBoyutu$, $max(i)$ is asked
- Average step count of storing elements, $average(i)$ is asked
- $hash_1(x)$ ve $hash_2(x)$ functions used
- Hash table size used

Note: Has functions and table size might not be the best solution. For evaluation they are not supposed to be the best.

Sample hash function: As elemts to be hashed are string values, a function like below can be used to map string values to table locations(integer). The function below is not a good hash function.

$$h(text) = ASCII(text[0]) + ASCII(text[1]) + ASCII(text[2]) \bmod Table Size$$

For example $h(\text{"Hash Algorithms"}) = ASCII(H) + ASCII(a) + ASCII(s) \bmod 11443 = 72 + 97 + 115 \bmod 11443 = 284$

Important Dates :

Tablo 1: Important Dates

Olay	Tarih	Konum	Biçim
Homework delivery	03.12.2017	EDS	source codes and project files

Instructions on Delivery

- Homeworks must be installed on Eđitim Destek Sistemi(<http://eds.pau.edu.tr/>) in a zipped file(preferably zip).
- Name of the project and zip file must be in format of HW<homework number>VY<student number>. For example a student with 11253699 number sending second homework must name his/her zip file HW2VY11253699.zip.
- Homeworks must be MS Visual Studio or Monodevelop project.
- You must provide your student number and name as comment on top of your source code.
- Homeworks must be solved individually. Students who is detected of cheating will have -100 score for the related homework.