X-Sender: hector@db.stanford.edu
Date: Thu, 15 Feb 2001 13:25:44 -0800
To: Diane Shankle <shankle@ee.stanford.edu>
From: Hector Garcia-Molina <hector@cs.stanford.edu>
Subject: Re: Quals Question 2001

At 10:43 AM 2/15/01 -0800, you wrote:
> I am still waiting for you to submit your Quals Question either by hard copy
> or email.
> Please try to submit by 2/23/01.

Here is my question.
hector

Quals 2001 Question
Hector Garcia-Molina

(a) What is a hash table? What is it used for?
How can collisions be handled?

(b) Write pseudo-code to insert a new key into
a hash table. Assume that open addressing is used to
resolve collisions.

The hash table is implemented with an array X
ranging from 0 to N. You are given a hash function h
that you can call; the function return an integer
between 0 and N. Your insert procedure takes
as input a key. It returns a flag that is either:
OK: the value was successfully inserted
DUP: the value was not inserted because it already
exists in the table
FULL: the table was full, no value was inserted.