

Homework - Week 9

CS 101

Due: Wednesday, November 14th

Table 1: Courses

Name	Instructor	Dates and Times
Introduction to Computer Science	John Dougherty	MW 12:30-2:00
Introduction to Data Structures	John Dougherty	TTh 11:30-1:00
Computer Science Research Foundations	Steven Lindell	MW 12:30-2:00
Analysis of Algorithms	Sorelle Friedler	TTh 1:00-2:30
Concurrency and Co-Design in Operating Systems	David Wonnacott	MW 2:30-4:00
Mobile Development for Social Change	Sorelle Friedler	TTh 10:00-11:30
Senior Thesis	David Wonnacott	HTBA

Table 2: Email Addresses

Name	E-mail
John Dougherty	jd@cs.haverford.edu
Steven Lindell	slindell@haverford.edu
Sorelle Friedler	sorelle@cs.haverford.edu
David Wonnacott	davew@cs.haverford.edu

1. Decrypt the message “24036615, 54184554, 12094536, 36152115” using the method discussed in class (where we map to the number the letter is in the alphabet) and the key 3. Note that you can check your answer by encrypting the result.

2. Give a database command that would operate over database Table 1 to return the name, instructor, and dates and times for only the introductory courses.
3. What are the candidate keys in Table 1?
4. Give the result of the following query:
Table 1 \bowtie Table 2 On Table 1.Instructor = Table 2.Name