CSCE 221 Assignment 5 Cover Page

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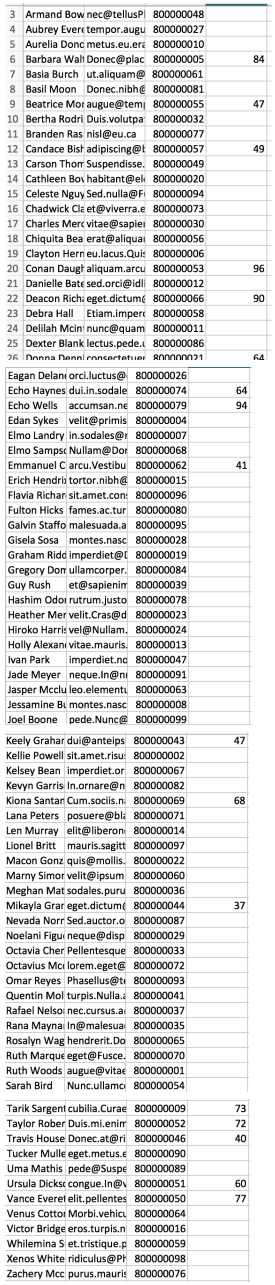
Please list all sources in the table below including web pages which you used to solve or implement the current homework. If you fail to cite sources you can get a lower number of points or even zero, read more on Aggie Honor System Office website: `http://aggiehonor.tamu.edu/`

Type of sources				
People	Bailey Bauman	James Moore	Samantha Ray	Abhshiek Joshi
Web pages (provide URL)				
Printed material				
Other Sources				

I certify that I have listed all the sources that I used to develop the solutions/codes to the submitted work. *On my honor as an Aggie, I have neither given nor received any unauthorized help on this academic work.*

Your Name Cody Williams Date 04-13-17

- (20 points) A report which should consists of the following parts:
  - The cover page.
  - Assignment number and its description.
    - Assignment 5, Creating an output file of student names, grades, UIN's and test scores from a hash table
  - Description of data structures and algorithms used by your program.
    - Hash Table
    - LinkedList
    - Vector
    - Array
  - Description of input and output data. List all restrictions and assumptions that you have imposed on your input data and program.
    - Input Data: A file containing the names of 17 students, their E-mails, UIN's and Test scores
    - Output Data: A file containing the names of 100 students, their Names, Email's, UIN's and the test scores of the 17 students from the input files.
  - How have you tested your program for corrections?
    - To ensure my program ran correctly, I tested my program on the Unix server several times and made sure that the appropriate output was generated correctly each time.



3	Armand Bow	nec@tellusPl	800000048	
4	Aubrey Ever	tempor.augu	800000027	
5	Aurelia Donc	metus.eu.era	800000010	
6	Barbara Walt	Donec@plac	800000005	84
7	Basia Burch	ut.aliquam@	800000061	
8	Basil Moon	Donec.nibh@	800000081	
9	Beatrice Mor	augue@temp	800000055	47
10	Bertha Rodri	Duis.volutpa	800000032	
11	Branden Ras	nisl@eu.ca	800000077	
12	Candace Bish	adipiscing@t	800000057	49
13	Carson Thom	Suspendisse.	800000049	
14	Cathleen Box	habitant@ele	800000020	
15	Celeste Nguy	Sed.nulla@Fu	800000094	
16	Chadwick Cle	et@viverra.e	800000073	
17	Charles Merc	vitae@sapien	800000030	
18	Chiquita Bea	erat@aliquat	800000056	
19	Clayton Hern	eu.lacus.Quis	800000006	
20	Conan Daugh	aliquam.arcu	800000053	96
21	Danielle Bate	sed.orci@idli	800000012	
22	Deacon Richa	eget.dictum@	800000066	90
23	Debra Hall	Etiam.imperd	800000058	
24	Delilah Mcin	nunc@quam	800000011	
25	Dexter Blank	lectus.pede.u	800000086	
26	Donna Penn	consectetuer	800000021	64
Eagan Delane	orci.luctus@	800000026		
Echo Haynes	dui.in.sodale	800000074	64	
Echo Wells	accumsan.ne	800000079	94	
Edan Sykes	velit@primis	800000004		
Elmo Landry	in.sodales@e	800000007		
Elmo Sampso	Nullam@Dor	800000068		
Emmanuel C	arcu.Vestibu	800000062	41	
Erich Hendri	tortor.nibh@	800000015		
Flavia Richar	sit.amet.con	800000096		
Fulton Hicks	fames.ac.tur	800000080		
Galvin Staffo	malesuada.a	800000095		
Gisela Sosa	montes.nasc	800000028		
Graham Ridd	imperdiet@E	800000019		
Gregory Don	ullamcorper.	800000084		
Guy Rush	et@sapienim	800000039		
Hashim Odor	rutrum.justo	800000078		
Heather Mer	velit.Cras@d	800000023		
Hiroko Harris	vel@Nullam.	800000024		
Holly Alexan	vitae.mauris.	800000013		
Ivan Park	imperdiet.no	800000047		
Jade Meyer	neque.In@ni	800000091		
Jasper Mcclu	leo.elementu	800000063		
Jessamine Bu	montes.nasc	800000008		
Joel Boone	pede.Nunc@	800000099		
Keely Grahar	dui@anteips	800000043	47	
Kellie Powell	sit.amet.risu	800000002		
Kelsey Bean	imperdiet.or	800000067		
Kevyn Garris	In.ornare@n	800000082		
Kiona Santar	Cum.sociis.n	800000069	68	
Lana Peters	posuere@bla	800000071		
Len Murray	elit@liberon	800000014		
Lionel Britt	mauris.sagitt	800000097		
Macon Gonz	quis@mollis.	800000022		
Marny Simor	velit@ipsum	800000060		
Meghan Mat	sodales.puru	800000036		
Mikayla Grar	eget.dictum@	800000044	37	
Nevada Norr	Sed.auctor.o	800000087		
Noelani Figu	neque@disp	800000029		
Octavia Cher	Pellentesque	800000033		
Octavius Mc	lorem.eget@	800000072		
Omar Reyes	Phasellus@te	800000093		
Quentin Mol	turpis.Nulla.a	800000041		
Rafael Nelso	nec.cursus.a	800000037		
Rana Mayna	In@malesua	800000035		
Rosalyn Wag	hendrerit.Do	800000065		
Ruth Marque	eget@Fusce.	800000070		
Ruth Woods	augue@vitae	800000001		
Sarah Bird	Nunc.ullamc	800000054		
Tarik Sargent	cubilia.Curae	800000009	73	
Taylor Rober	Duis.mi.enim	800000052	72	
Travis House	Donec.at@ri	800000046	40	
Tucker Mulle	eget.metus.e	800000090		
Uma Mathis	pede@Suspe	800000089		
Ursula Dicks	congue.In@V	800000051	60	
Vance Everet	elit.pellentes	800000050	77	
Venus Cotto	Morbi.vehicu	800000064		
Victor Bridge	eros.turpis.n	800000016		
Whilemina S	et.tristique.p	800000059		
Xenos White	ridiculus@Ph	800000098		
Zachery Mcc	purus.mauris	800000076		

- Which C++ features or standard library classes have you used in your program?
  - <iostream> <cstdlib> <string> <cstdio> <string> <fstream> <regex>
- Provide the statistics about the hash table. Are the computational results about the hashing consistent with the expected running time for the hashing algorithm? Justify your answer.
  - minimum: 1
  - maximum: 1
  - average: 1
- Write your conclusion.
  - Because this assignment instructed us to create a hash table of size 100, the running time of the search function ended up being O(n). The minimum, maximum and average lengths of the linked lists were also 1 because of this instruction.