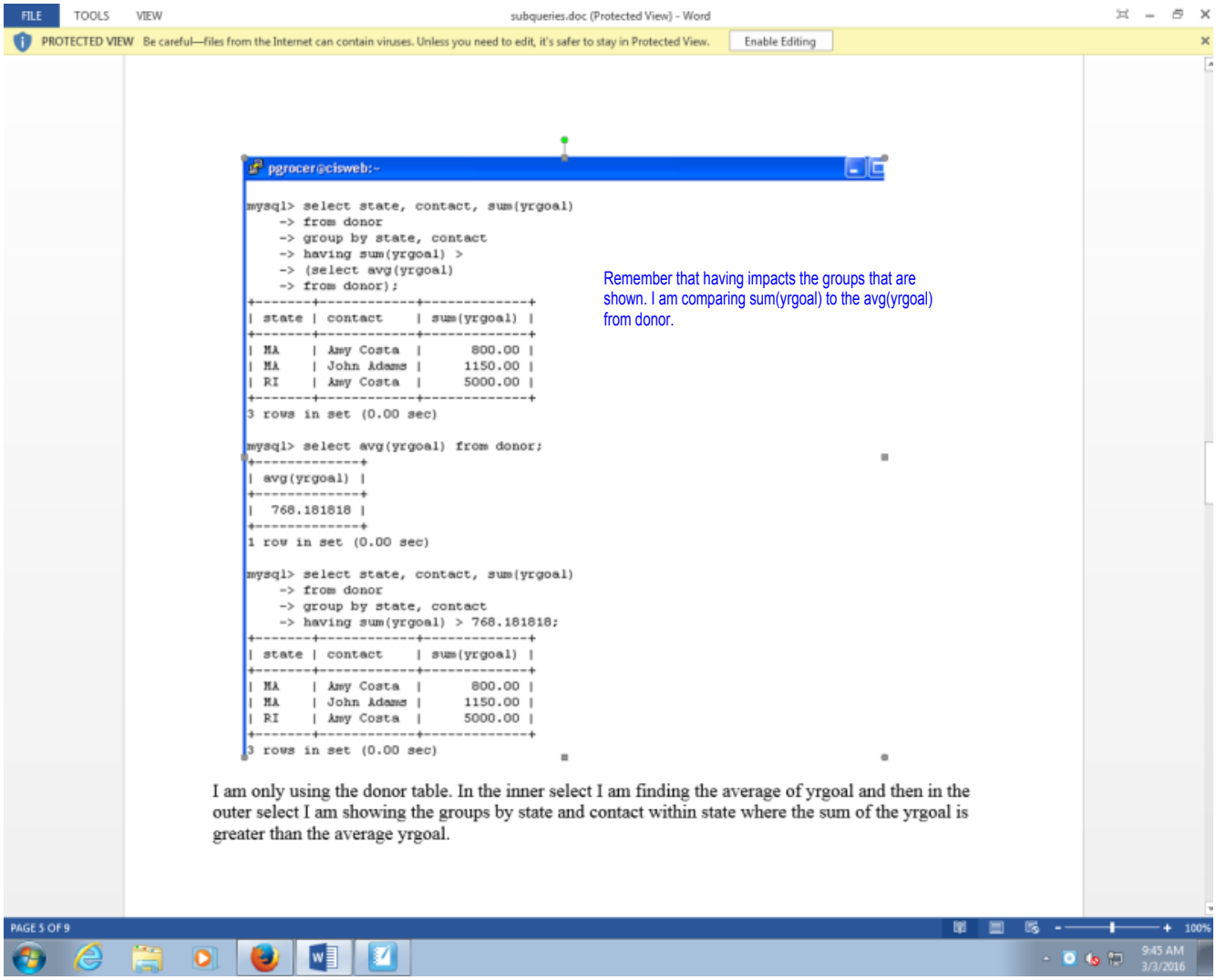
FILE TOOLS VIEW
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Enable Editing
pgrocer@cisweb:~
mysql> select state, contact, sum(yrgoal)
-> from donor
-> group by state, contact
-> having sum(yrgoal) >
-> (select avg(yrgoal)
-> from donor);
+-------+------------+-------------+
| state | contact | sum(yrgoal) |
+-------+------------+-------------+
MA	Amy Costa	800.00
MA	John Adams	1150.00
RI	Amy Costa	5000.00
+-------+------------+-------------+
3 rows in set (0.00 sec)
mysql> select avg(yrgoal) from donor;
+-------------+
| avg(yrgoal) |
+-------------+
| 768.181818 |
+-------------+
1 row in set (0.00 sec)
mysql> select state, contact, sum(yrgoal)
-> from donor
-> group by state, contact
-> having sum(yrgoal) > 768.181818;
+-------+------------+-------------+
| state | contact | sum(yrgoal) |
+-------+------------+-------------+
MA	Amy Costa	800.00
MA	John Adams	1150.00
RI	Amy Costa	5000.00
+-------+------------+-------------+
3 rows in set (0.00 sec)
Remember that having impacts the groups that are shown. I am comparing sum(yrgoal) to the avg(yrgoal) from donor.
I am only using the donor table. In the inner select I am finding the average of yrgoal and then in the outer select I am showing the groups by state and contact within state where the sum of the yrgoal is greater than the average yrgoal.
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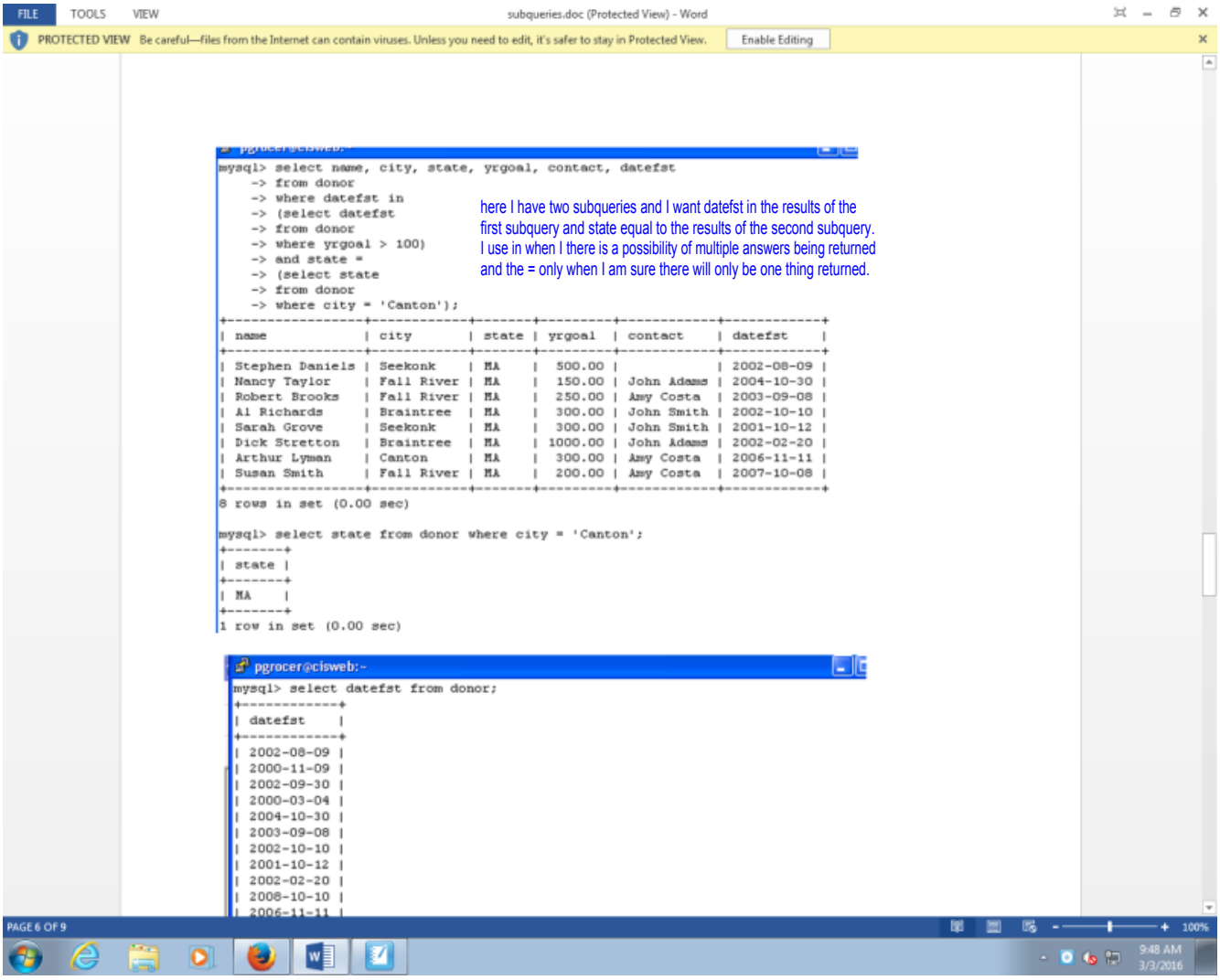
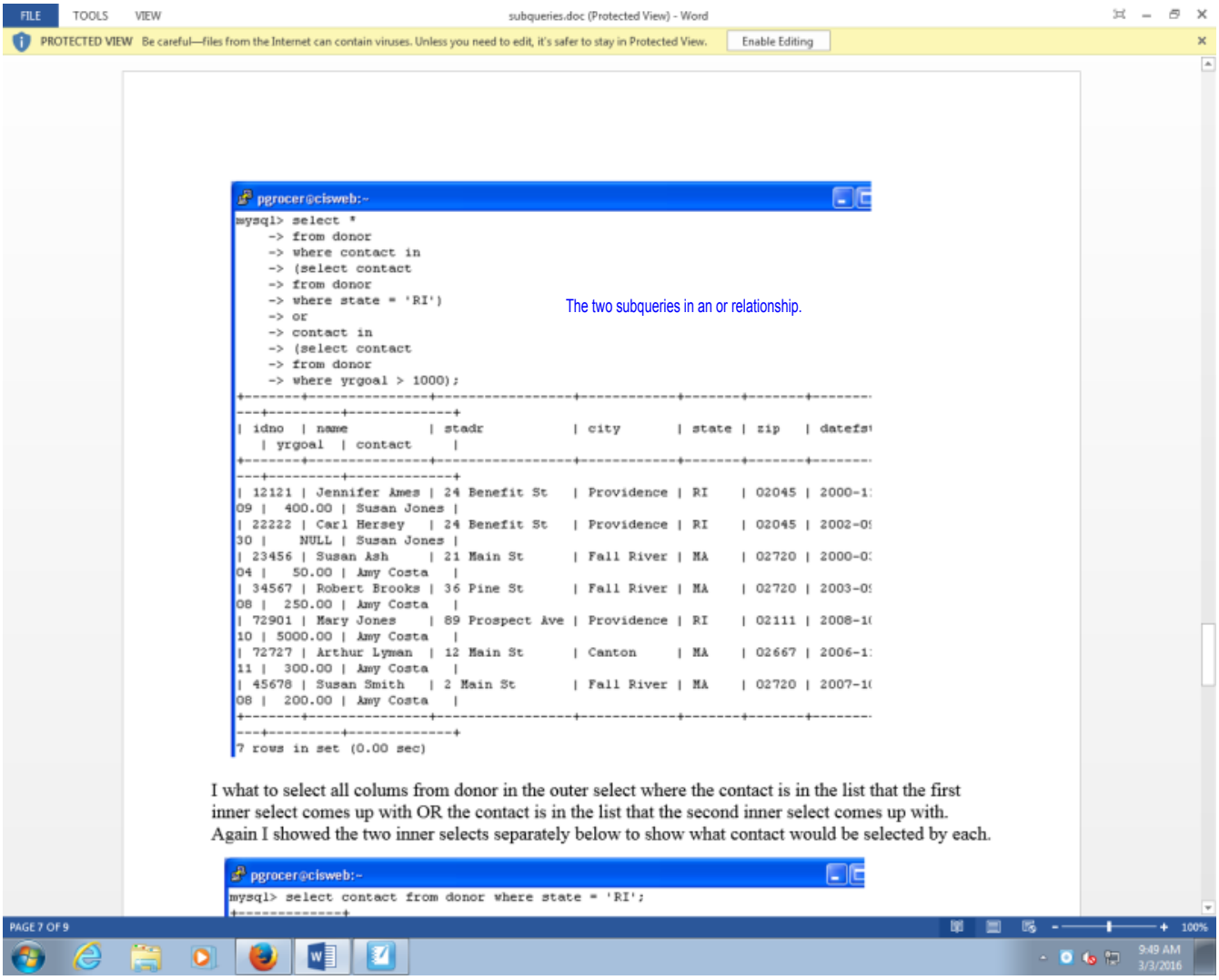
3/3/2016




```
mysql> select name, city, state, yrgoal, contact, datefst
    -> from donor
    -> where datefst in
    -> (select datefst
    -> from donor
    -> where yrgoal > 100)
    -> and state =
    -> (select state
    -> from donor
    -> where city = 'Canton');
+----------------+------------+-------+---------+------------+------------+
| name           | city       | state | yrgoal  | contact    | datefst    |
+----------------+------------+-------+---------+------------+------------+
| Stephen Daniels | Seekonk    | MA    |  500.00 |            | 2002-08-09 |
| Nancy Taylor   | Fall River | MA    |  150.00 | John Adams | 2004-10-30 |
| Robert Brooks  | Fall River | MA    |  250.00 | Amy Costa  | 2003-09-08 |
| Al Richards    | Braintree  | MA    |  300.00 | John Smith | 2002-10-10 |
| Sarah Grove    | Seekonk    | MA    |  300.00 | John Smith | 2001-10-12 |
| Dick Stretton  | Braintree  | MA    | 1000.00 | John Adams | 2002-02-20 |
| Arthur Lyman   | Canton     | MA    |  300.00 | Amy Costa  | 2006-11-11 |
| Susan Smith    | Fall River | MA    |  200.00 | Amy Costa  | 2007-10-08 |
+----------------+------------+-------+---------+------------+------------+
8 rows in set (0.00 sec)

mysql> select state from donor where city = 'Canton';
+-------+
| state |
+-------+
| MA    |
+-------+
1 row in set (0.00 sec)
```

```
pgrocer@cisweb:~
mysql> select datefst from donor;
+------------+
| datefst    |
+------------+
| 2002-08-09 |
| 2000-11-09 |
| 2002-09-30 |
| 2000-03-04 |
| 2004-10-30 |
| 2003-09-08 |
| 2002-10-10 |
| 2001-10-12 |
| 2002-02-20 |
| 2008-10-10 |
| 2006-11-11 |
```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pgrocer@cisweb:~
mysql> select *
-> from donor
-> where contact in
-> (select contact
-> from donor
-> where state = 'RI')
-> or
-> contact in
-> (select contact
-> from donor
-> where yrgoal > 1000);
| idno | name | stadr | city | state | zip | datefs
| yrgoal | contact |
| 12121 | Jennifer Ames | 24 Benefit St | Providence | RI | 02045 | 2000-1
09 | 400.00 | Susan Jones |
| 22222 | Carl Hersey | 24 Benefit St | Providence | RI | 02045 | 2002-0
30 | NULL | Susan Jones |
| 23456 | Susan Ash | 21 Main St | Fall River | MA | 02720 | 2000-0
04 | 50.00 | Amy Costa |
| 34567 | Robert Brooks | 36 Pine St | Fall River | MA | 02720 | 2003-0
08 | 250.00 | Amy Costa |
| 72901 | Mary Jones | 89 Prospect Ave | Providence | RI | 02111 | 2008-1
10 | 5000.00 | Amy Costa |
| 72727 | Arthur Lyman | 12 Main St | Canton | MA | 02667 | 2006-1
11 | 300.00 | Amy Costa |
| 45678 | Susan Smith | 2 Main St | Fall River | MA | 02720 | 2007-1
08 | 200.00 | Amy Costa |
7 rows in set (0.00 sec)
The two subqueries in an or relationship.
I what to select all colums from donor in the outer select where the contact is in the list that the first inner select comes up with OR the contact is in the list that the second inner select comes up with. Again I showed the two inner selects separately below to show what contact would be selected by each.
pgrocer@cisweb:~
mysql> select contact from donor where state = 'RI';
PAGE 7 OF 9
100%
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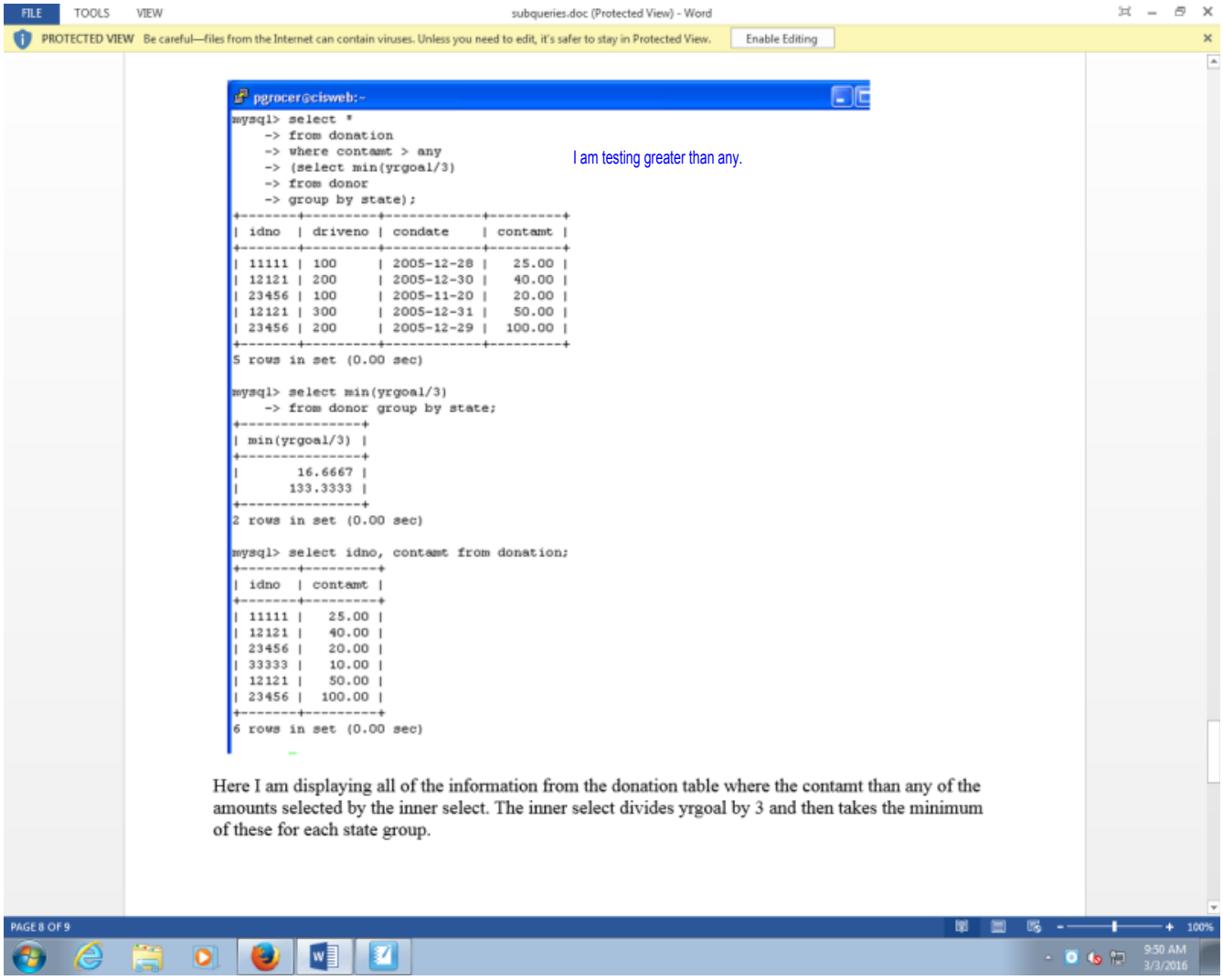
3/3/2016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pgrocer@cisweb:~
mysql> select *
-> from donation
-> where contamt > any
-> (select min(yrgoal/3)
-> from donor
-> group by state);
+-------+---------+------------+---------+
| idno | driveno | condate | contamt |
+-------+---------+------------+---------+
11111	100	2005-12-28	25.00
12121	200	2005-12-30	40.00
23456	100	2005-11-20	20.00
12121	300	2005-12-31	50.00
23456	200	2005-12-29	100.00
+-------+---------+------------+---------+
5 rows in set (0.00 sec)
mysql> select min(yrgoal/3)
-> from donor group by state;
+---------------+
| min(yrgoal/3) |
+---------------+
| 16.6667 |
| 133.3333 |
+---------------+
2 rows in set (0.00 sec)
mysql> select idno, contamt from donation;
+-------+---------+
| idno | contamt |
+-------+---------+
11111	25.00
12121	40.00
23456	20.00
33333	10.00
12121	50.00
23456	100.00
+-------+---------+
6 rows in set (0.00 sec)
I am testing greater than any.
Here I am displaying all of the information from the donation table where the contamt than any of the amounts selected by the inner select. The inner select divides yrgoal by 3 and then takes the minimum of these for each state group.
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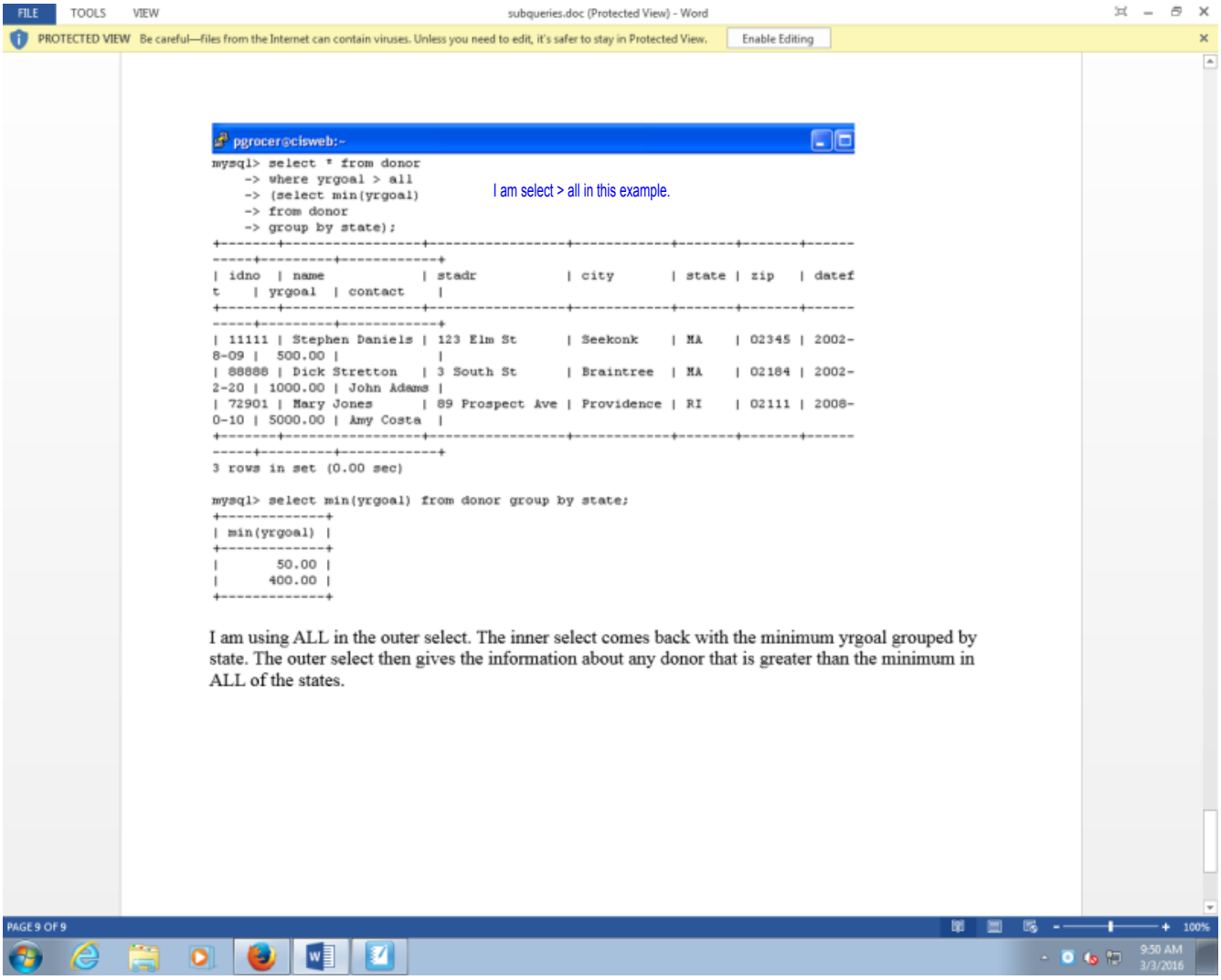
3/3/2016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Enable Editing
pgrocer@cisweb:~
mysql> select * from donor
-> where yrgoal > all
-> (select min(yrgoal)
-> from donor
-> group by state);
I am select > all in this example.
| idno | name | stadr | city | state | zip | datef
t | yrgoal | contact |
| 11111 | Stephen Daniels | 123 Elm St | Seekonk | MA | 02345 | 2002-
8-09 | 500.00 | |
| 88888 | Dick Stretton | 3 South St | Braintree | MA | 02184 | 2002-
2-20 | 1000.00 | John Adams |
| 72901 | Mary Jones | 89 Prospect Ave | Providence | RI | 02111 | 2008-
0-10 | 5000.00 | Amy Costa |
3 rows in set (0.00 sec)
mysql> select min(yrgoal) from donor group by state;
| min(yrgoal) |
| 50.00 |
| 400.00 |
I am using ALL in the outer select. The inner select comes back with the minimum yrgoal grouped by state. The outer select then gives the information about any donor that is greater than the minimum in ALL of the states.
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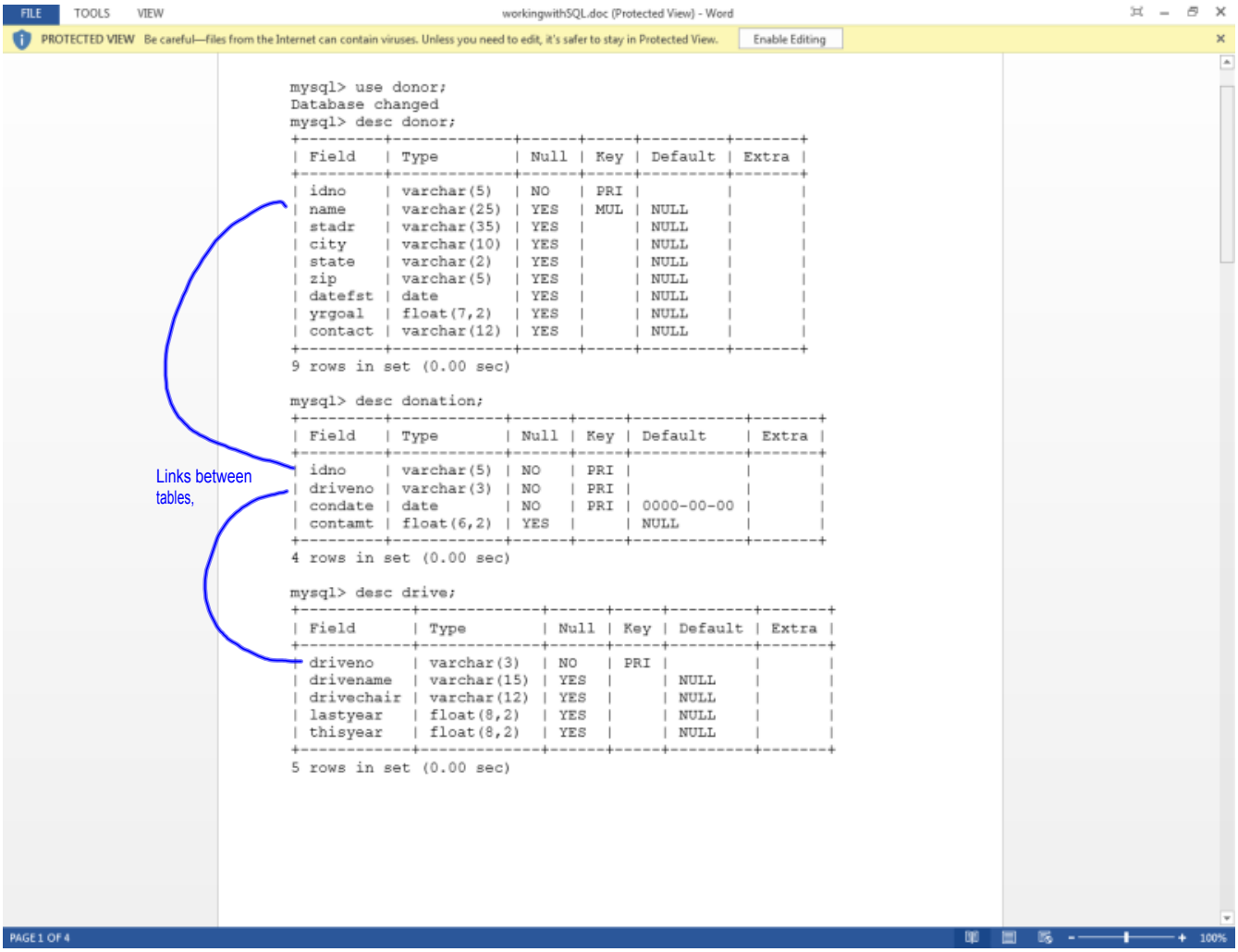
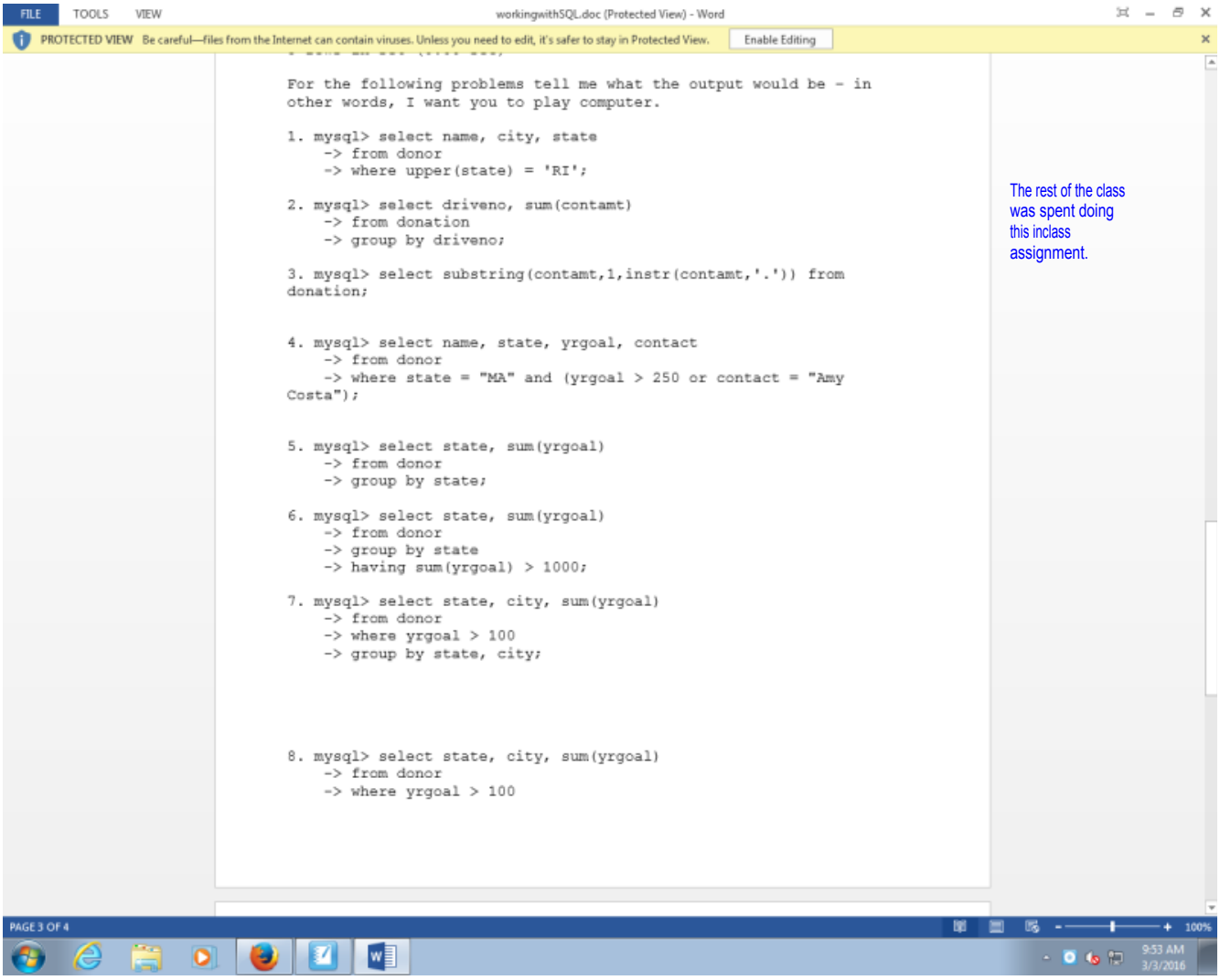
3/3/2016




```
mysql> use donor;
Database changed
mysql> desc donor;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| idno    | varchar(5)  | NO   | PRI |         |       |
| name    | varchar(25) | YES  | MUL | NULL    |       |
| stadr   | varchar(35) | YES  |     | NULL    |       |
| city    | varchar(10) | YES  |     | NULL    |       |
| state   | varchar(2)  | YES  |     | NULL    |       |
| zip     | varchar(5)  | YES  |     | NULL    |       |
| datefst | date        | YES  |     | NULL    |       |
| yrgoal  | float(7,2)  | YES  |     | NULL    |       |
| contact | varchar(12) | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
9 rows in set (0.00 sec)

mysql> desc donation;
+---------+------------+------+-----+------------+-------+
| Field   | Type       | Null | Key | Default    | Extra |
+---------+------------+------+-----+------------+-------+
| idno    | varchar(5) | NO   | PRI |            |       |
| driveno | varchar(3) | NO   | PRI |            |       |
| condate | date       | NO   | PRI | 0000-00-00 |       |
| contamt | float(6,2) | YES  |     | NULL       |       |
+---------+------------+------+-----+------------+-------+
4 rows in set (0.00 sec)

mysql> desc drive;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| driveno    | varchar(3)  | NO   | PRI |         |       |
| drivename  | varchar(15) | YES  |     | NULL    |       |
| drivechair | varchar(12) | YES  |     | NULL    |       |
| lastyear   | float(8,2)  | YES  |     | NULL    |       |
| thisyear   | float(8,2)  | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```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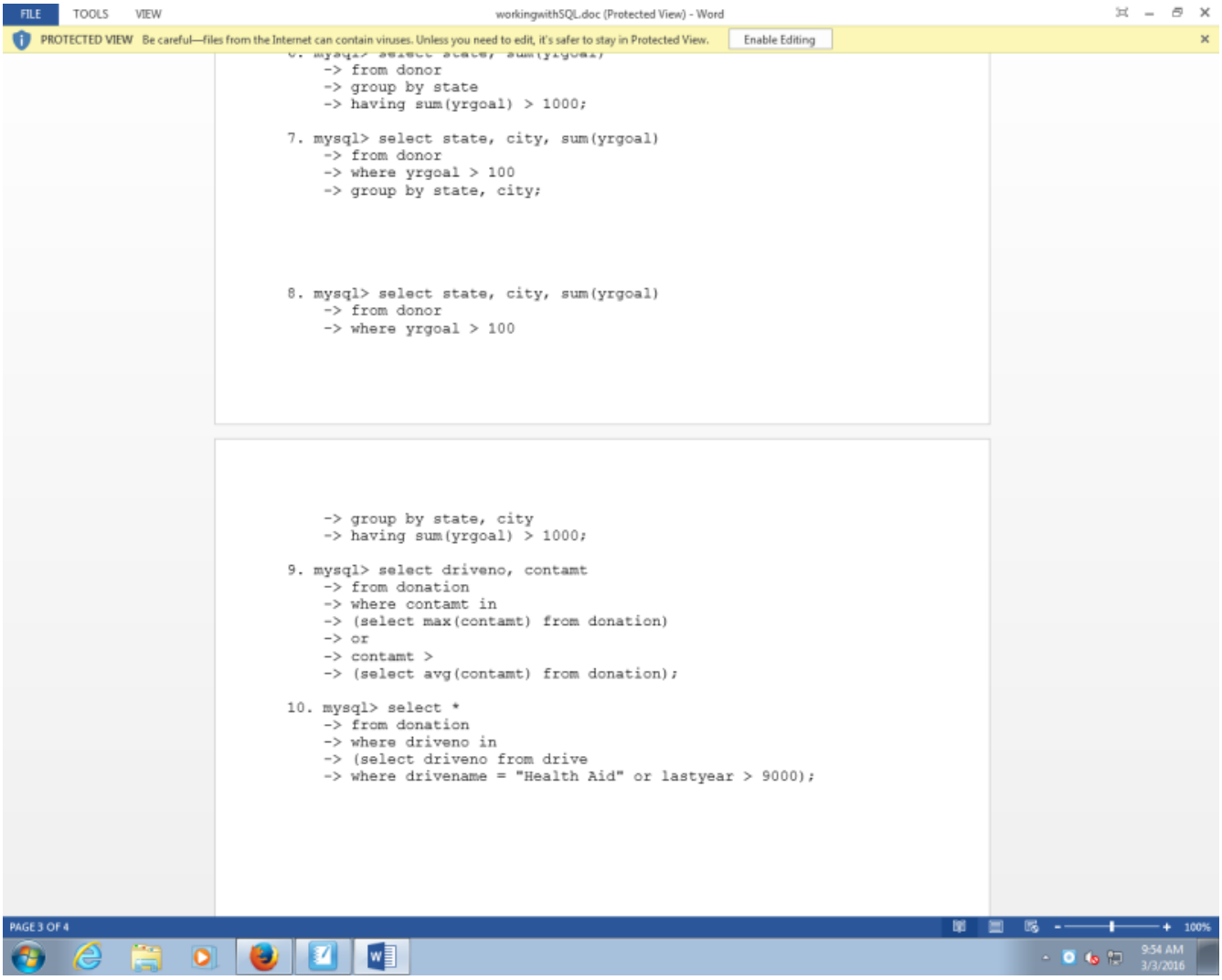
For the following problems tell me what the output would be - in other words, I want you to play computer.
1. mysql> select name, city, state
-> from donor
-> where upper(state) = 'RI';
2. mysql> select driveno, sum(contamt)
-> from donation
-> group by driveno;
3. mysql> select substring(contamt,1,instr(contamt,'.')) from donation;
4. mysql> select name, state, yrgoal, contact
-> from donor
-> where state = "MA" and (yrgoal > 250 or contact = "Amy Costa");
5. mysql> select state, sum(yrgoal)
-> from donor
-> group by state;
6. mysql> select state, sum(yrgoal)
-> from donor
-> group by state
-> having sum(yrgoal) > 1000;
7. mysql> select state, city, sum(yrgoal)
-> from donor
-> where yrgoal > 100
-> group by state, city;
8. mysql> select state, city, sum(yrgoal)
-> from donor
-> where yrgoal > 100
The rest of the class was spent doing this inclass assignment.
PAGE 3 OF 4
100%
9:53 AM
3/3/2016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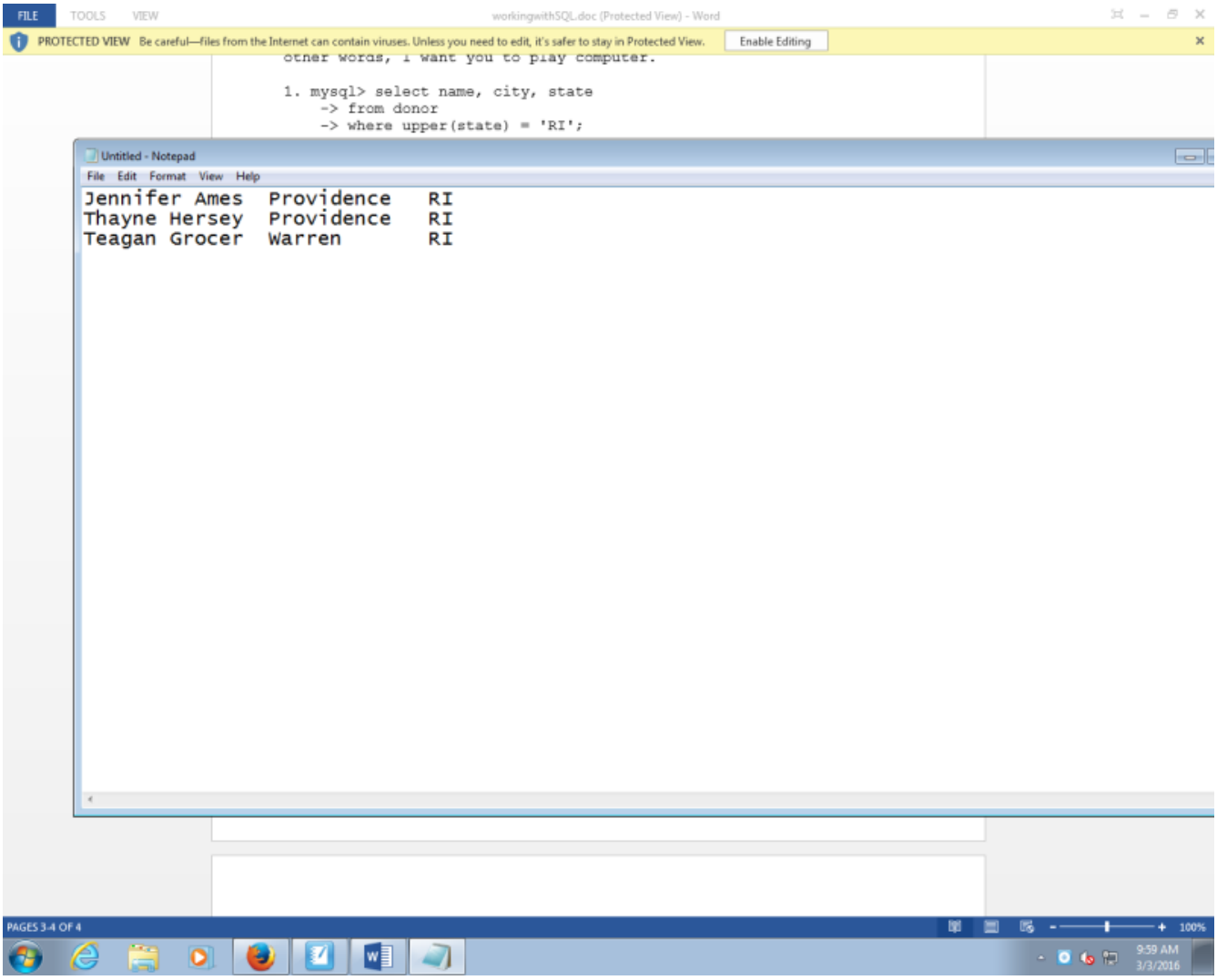
workingwithSQL.doc (Protected View) - Word
PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View.
Enable Editing
-> from donor
-> group by state
-> having sum(yrgoal) > 1000;
7. mysql> select state, city, sum(yrgoal)
-> from donor
-> where yrgoal > 100
-> group by state, city;
8. mysql> select state, city, sum(yrgoal)
-> from donor
-> where yrgoal > 100
-> group by state, city
-> having sum(yrgoal) > 1000;
9. mysql> select driveno, contamt
-> from donation
-> where contamt in
-> (select max(contamt) from donation)
-> or
-> contamt >
-> (select avg(contamt) from donation);
10. mysql> select *
-> from donation
-> where driveno in
-> (select driveno from drive
-> where drivename = "Health Aid" or lastyear > 9000);
PAGE 3 OF 4
100%
9:54 AM
3/3/2016


FILE
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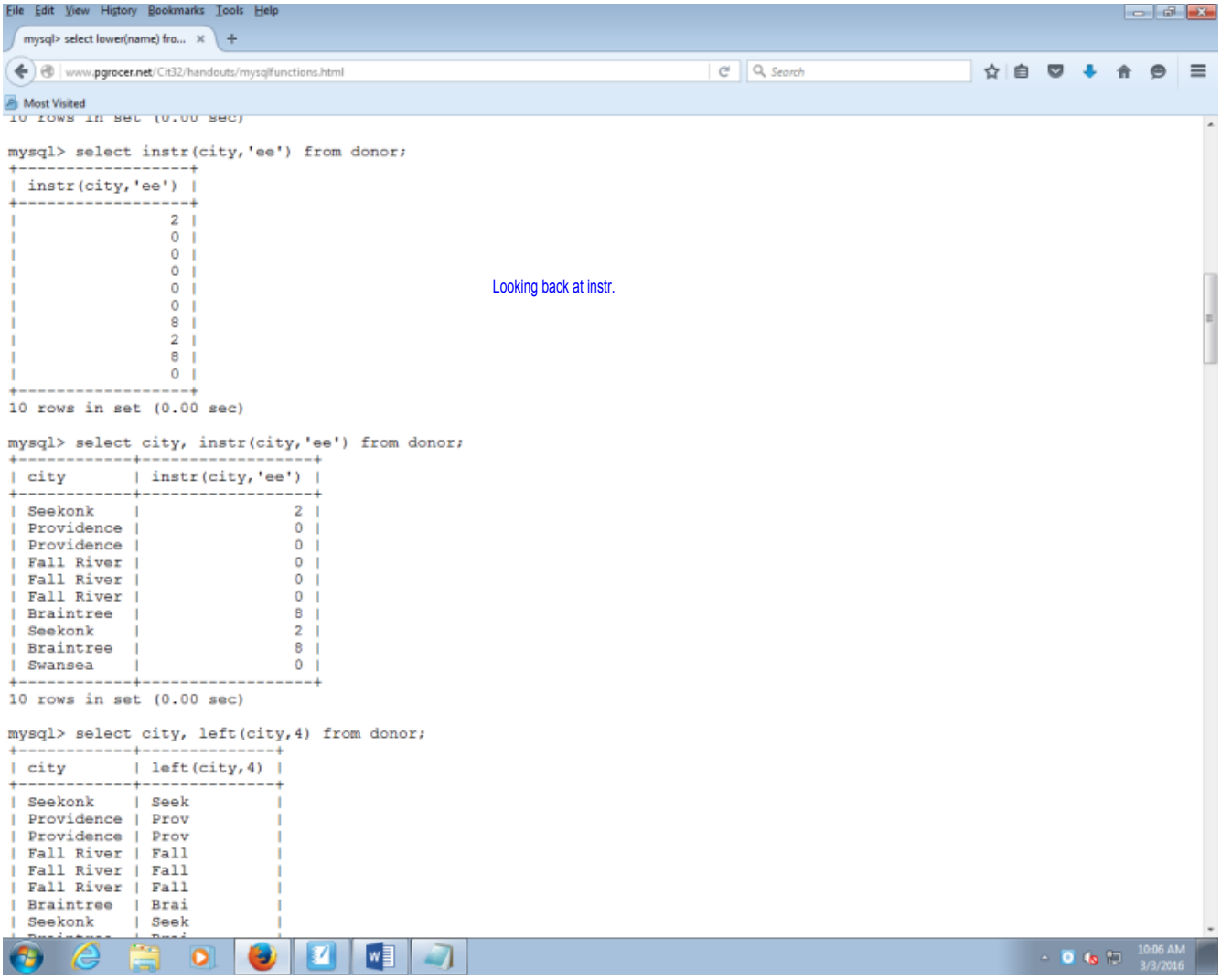
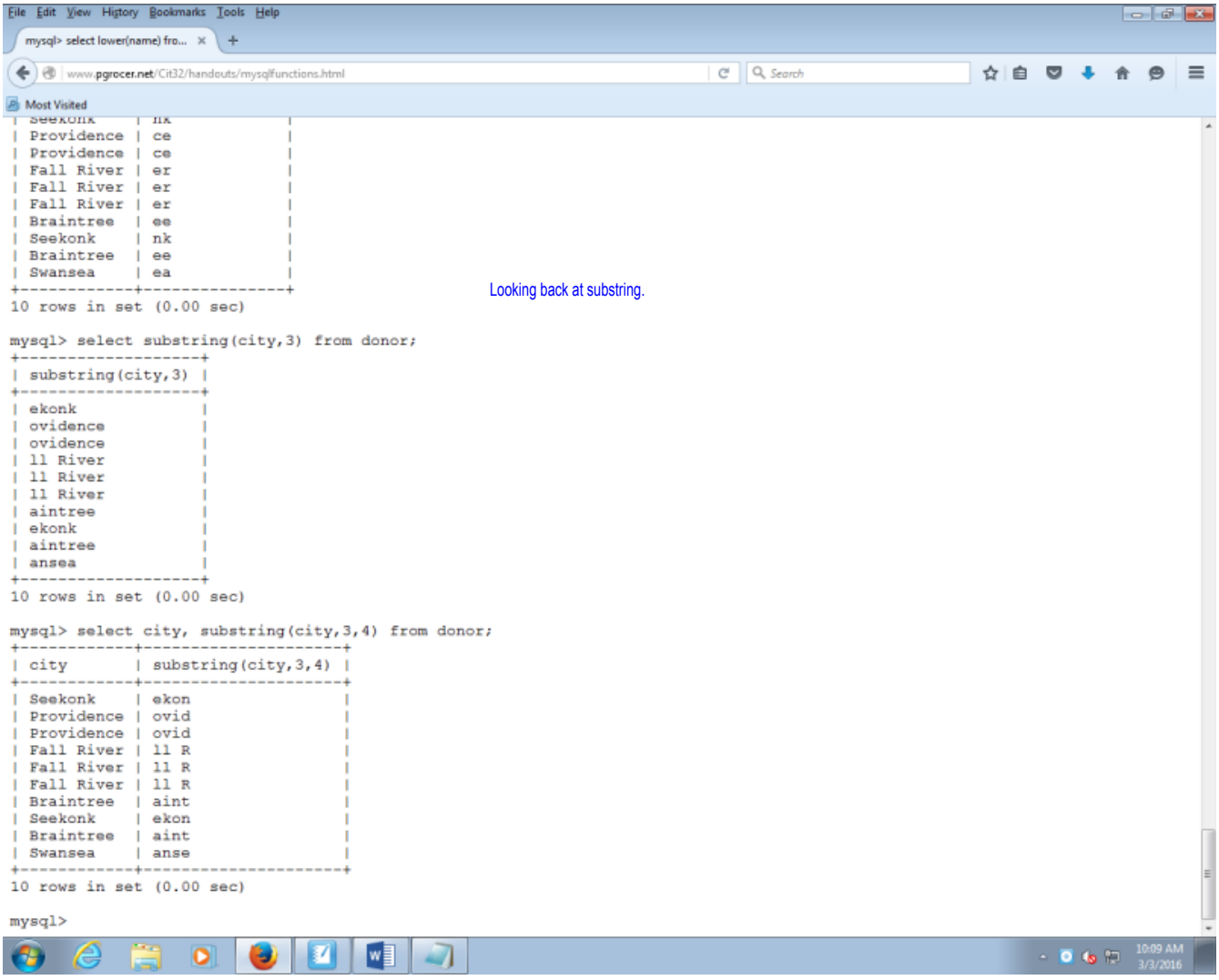
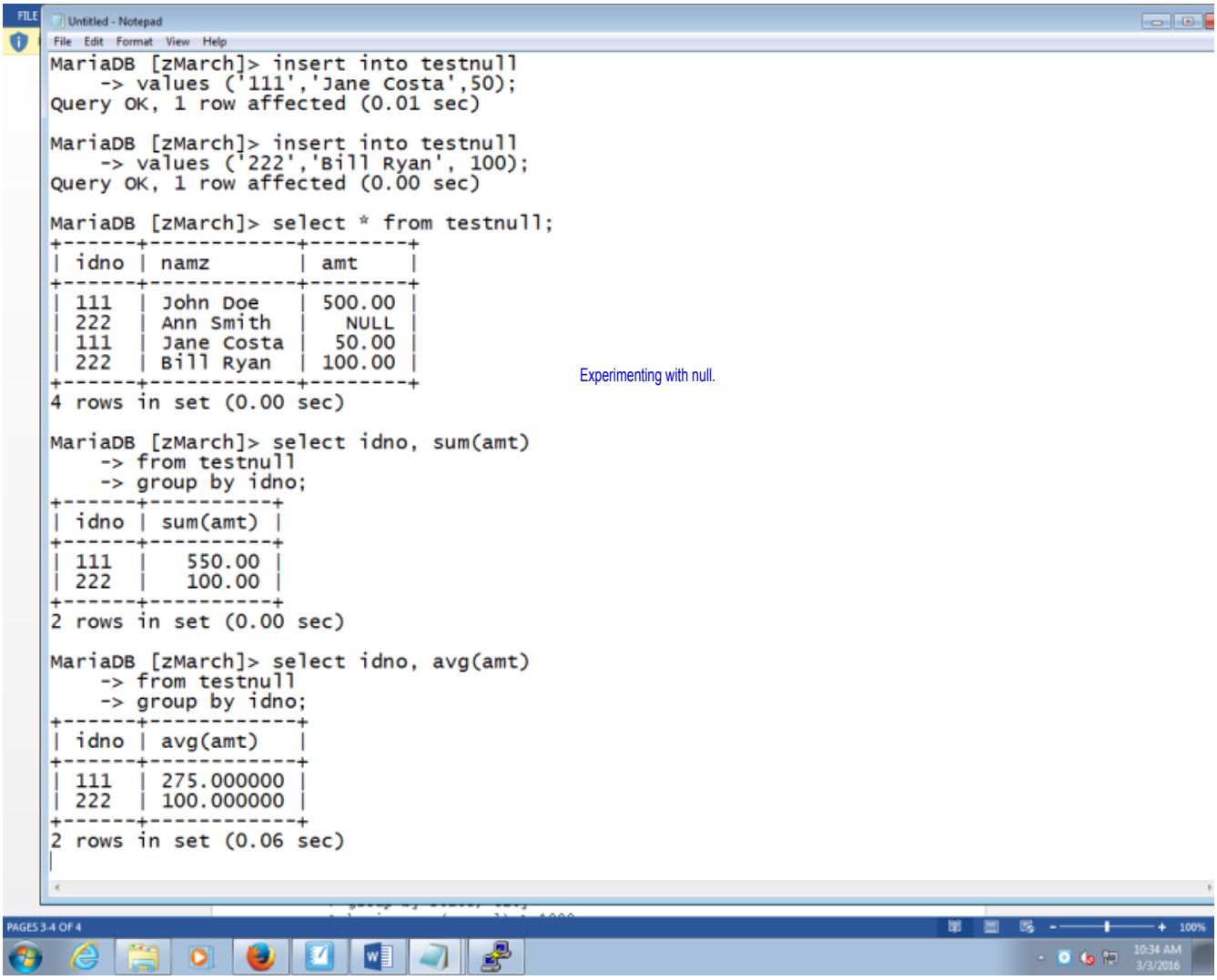
Enable Editing
other words, I want you to play computer.
1. mysql> select name, city, state
-> from donor
-> where upper(state) = 'RI';
Untitled - Notepad
File Edit Format View Help
Jennifer Ames Providence RI
Thayne Hersey Providence RI
Teagan Grocer Warren RI
PAGES 3-4 OF 4
100%
9:59 AM
3/3/2016


File Edit View History Bookmarks Tools Help
mysql> select lower(name) fro...
www.pgrocer.net/Cit32/handouts/mysqlfunctions.html
Search
Most Visited
10 rows in set (0.00 sec)
mysql> select instr(city,'ee') from donor;
+------------------+
| instr(city,'ee') |
+------------------+
| 2 |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| 8 |
| 2 |
| 8 |
| 0 |
+------------------+
10 rows in set (0.00 sec)
Looking back at instr.
mysql> select city, instr(city,'ee') from donor;
+------------+------------------+
| city | instr(city,'ee') |
+------------+------------------+
Seekonk	2
Providence	0
Providence	0
Fall River	0
Fall River	0
Fall River	0
Braintree	8
Seekonk	2
Braintree	8
Swansea	0
+------------+------------------+
10 rows in set (0.00 sec)
mysql> select city, left(city,4) from donor;
+------------+--------------+
| city | left(city,4) |
+------------+--------------+
Seekonk	Seek
Providence	Prov
Providence	Prov
Fall River	Fall
Fall River	Fall
Fall River	Fall
Braintree	Brai
Seekonk	Seek
10:06 AM
3/3/2016



Looking back at substring.



Experimenting with null.