

ASSIGNMENT_4

May 3, 2020

```
[1]: %load_ext sql
```

```
[2]: %sql ibm_db_sa://bvv57311:Nipunbansal123!@dashdb-txn-sbox-yp-dal09-08.services.
      ↪dal.bluemix.net:50000/BLUDB
```

```
[2]: 'Connected: bvv57311@BLUDB'
```

```
[5]: #1
     %sql select count(*) from CRIME
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.
```

```
[5]: [(Decimal('533'),)]
```

```
[6]: #2
     %sql select * from CRIME limit 10;
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.
```

```
[6]: [(3512276, 'HK587712', '08/28/2004 05:50:56 PM', '047XX S KEDZIE AVE', '890',
      'THEFT', 'FROM BUILDING', 'SMALL RETAIL STORE', 'FALSE', 'FALSE', 911, 9, 14,
      58, '6', 1155838, 1873050, 2004, '02/10/2018 03:50:01 PM',
      Decimal('41.80744050'), Decimal('-87.70395585'), '(41.8074405, -87.703955849)'),
      (3406613, 'HK456306', '06/26/2004 12:40:00 PM', '009XX N CENTRAL PARK AVE',
      '820', 'THEFT', '$500 AND UNDER', 'OTHER', 'FALSE', 'FALSE', 1112, 11, 27, 23,
      '6', 1152206, 1906127, 2004, '02/28/2018 03:56:25 PM', Decimal('41.89827996'),
      Decimal('-87.71640551'), '(41.898279962, -87.716405505)'),
      (8002131, 'HT233595', '04/04/2011 05:45:00 AM', '043XX S WABASH AVE', '820',
      'THEFT', '$500 AND UNDER', 'NURSING HOME/RETIREMENT HOME', 'FALSE', 'FALSE',
      221, 2, 3, 38, '6', 1177436, 1876313, 2011, '02/10/2018 03:50:01 PM',
      Decimal('41.81593313'), Decimal('-87.62464213'), '(41.815933131,
      -87.624642127)'),
      (7903289, 'HT133522', '12/30/2010 04:30:00 PM', '083XX S KINGSTON AVE', '840',
      'THEFT', 'FINANCIAL ID THEFT: OVER $300', 'RESIDENCE', 'FALSE', 'FALSE', 423, 4,
```

```

7, 46, '6', 1194622, 1850125, 2010, '02/10/2018 03:50:01 PM',
Decimal('41.74366532'), Decimal('-87.56246276'), '(41.743665322,
-87.562462756)'),
(10402076, 'HZ138551', '02/02/2016 07:30:00 PM', '033XX W 66TH ST', '820',
'THEFT', '$500 AND UNDER', 'ALLEY', 'FALSE', 'FALSE', 831, 8, 15, 66, '6',
1155240, 1860661, 2016, '02/10/2018 03:50:01 PM', Decimal('41.77345530'),
Decimal('-87.70648047'), '(41.773455295, -87.706480471)'),
(7732712, 'HS540106', '09/29/2010 07:59:00 AM', '006XX W CHICAGO AVE', '810',
'THEFT', 'OVER $500', 'PARKING LOT/GARAGE(NON.RESID.)', 'FALSE', 'FALSE', 1323,
12, 27, 24, '6', 1171668, 1905607, 2010, '02/10/2018 03:50:01 PM',
Decimal('41.89644677'), Decimal('-87.64493868'), '(41.896446772,
-87.644938678)'),
(10769475, 'HZ534771', '11/30/2016 01:15:00 AM', '050XX N KEDZIE AVE', '810',
'THEFT', 'OVER $500', 'STREET', 'FALSE', 'FALSE', 1713, 17, 33, 14, '6',
1154133, 1933314, 2016, '02/10/2018 03:50:01 PM', Decimal('41.97284491'),
Decimal('-87.70860008'), '(41.972844913, -87.708600079)'),
(4494340, 'HL793243', '12/16/2005 04:45:00 PM', '005XX E PERSHING RD', '860',
'THEFT', 'RETAIL THEFT', 'GROCERY FOOD STORE', 'TRUE', 'FALSE', 213, 2, 3, 38,
'6', 1180448, 1879234, 2005, '02/28/2018 03:56:25 PM', Decimal('41.82387989'),
Decimal('-87.61350386'), '(41.823879885, -87.613503857)'),
(3778925, 'HL149610', '01/28/2005 05:00:00 PM', '100XX S WASHTENAW AVE', '810',
'THEFT', 'OVER $500', 'STREET', 'FALSE', 'FALSE', 2211, 22, 19, 72, '6',
1160129, 1838040, 2005, '02/28/2018 03:56:25 PM', Decimal('41.71128051'),
Decimal('-87.68917910'), '(41.711280513, -87.689179097)'),
(3324217, 'HK361551', '05/13/2004 02:15:00 PM', '033XX W BELMONT AVE', '820',
'THEFT', '$500 AND UNDER', 'SMALL RETAIL STORE', 'FALSE', 'FALSE', 1733, 17, 35,
21, '6', 1153590, 1921084, 2004, '02/28/2018 03:56:25 PM',
Decimal('41.93929582'), Decimal('-87.71092344'), '(41.939295821,
-87.710923442)')]

```

```

[13]: #3
      %%sql
      select count(*) from CRIME where ARREST=TRUE;

```

```

* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.

```

```

[13]: [(Decimal('163'),)]

```

```

[18]: #4
      %sql select distinct (PRIMARY_TYPE) \
      from CRIME\
      where LOCATION_DESCRIPTION = 'GAS STATION'

```

```

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Done.

```

[18]: [('CRIMINAL TRESPA',), ('NARCOTICS',), ('ROBBERY',), ('THEFT',)]

```
[20]: #5
%sql select COMMUNITY_AREA_NAME from CENSUS where COMMUNITY_AREA_NAME like 'B%'
```

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Done.
```

[20]: [('Belmont Cragin',),
('Burnside',),
('Brighton Park',),
('Bridgeport',),
('Beverly',)]

```
[21]: #6
%sql select NAME_OF_SCHOOL from \
(select NAME_OF_SCHOOL, HEALTHY_SCHOOL_CERTIFIED, COMMUNITY_AREA_NUMBER \
from SCHOOLS\
where COMMUNITY_AREA_NUMBER between 10 and 15)\
where HEALTHY_SCHOOL_CERTIFIED = 'Yes';
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.
```

[21]: [('Rufus M Hitch Elementary School',)]

```
[23]: #7
%sql select avg(SAFETY_SCORE) from SCHOOLS;
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.
```

[23]: [(Decimal('49.504873'),)]

```
[24]: #8
%sql select COMMUNITY_AREA_NAME, avg(COLLEGE_ENROLLMENT) as number_of_students \
from SCHOOLS \
group by COMMUNITY_AREA_NAME \
order by number_of_students desc \
limit 5;
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.bluemix.net:50000/BLUDB
Done.
```

```
[24]: [('ARCHER HEIGHTS', Decimal('2411.500000')),
      ('MONTCLARE', Decimal('1317.000000')),
      ('WEST ELSDON', Decimal('1233.333333')),
      ('BRIGHTON PARK', Decimal('1205.875000')),
      ('BELMONT CRAGIN', Decimal('1198.833333'))]
```

```
[25]: #9
%sql select community_area_name from SCHOOLS\
where safety_score = (select min(safety_score) \
                      from SCHOOLS);
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.ibm.com:50000/BLUDB
Done.
```

```
[25]: [('WASHINGTON PARK',)]
```

```
[26]: #10
%sql select PER_CAPITA_INCOME, COMMUNITY_AREA_NAME \
from CENSUS\
where COMMUNITY_AREA_NUMBER = (select COMMUNITY_AREA_NUMBER \
                                from SCHOOLS\
                                where SAFETY_SCORE = 1);
```

```
* ibm_db_sa://bvv57311:***@dashdb-txn-sbox-yp-
dal09-08.services.dal.ibm.com:50000/BLUDB
Done.
```

```
[26]: [(13785, 'Washington Park')]
```

```
[ ]:
```