

pgAdmin 4

127.0.0.1:5366/browser/

네이버GoogleYouTube구글캘린더지메일아주대학교 포탈아주 BbSpotifyMAPInstagramFacebookGitHubDEVPapago백준PhotoWindy: 날씨 레이더수시장인 : 네이버...공모논문읽기 목록

pgAdminFileObjectToolsHelp

BrowserServers (1)PostgreSQL 13Databases (2)AjouDBCatalogs (2)ANSI (information\_schema)PostgreSQL Catalog (pg\_catalog)Event TriggersExtensionsForeign Data WrappersLanguages (1)plpgsqlSchemas (1)publicCollationsDomainsFTS ConfigurationsFTS DictionariesAa FTS ParsersFTS TemplatesForeign TablesFunctionsMaterialized ViewsProcedures1.3 SequencesTables (3)applycollegestudentTrigger FunctionsTypesViewspostgresLogin/Group RolesTablespaces

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

AjouDB/postgres@PostgreSQL 13

Query EditorQuery HistoryScratch Pad

```
1 select S1.sID, S1.sName, S1.GPA, S2.sID, S2.sName, S2.GPA
2 from Student S1, Student S2
3 where S1.GPA = S2.GPA;
```

Data OutputExplainMessagesNotifications

|    | sid integer | sname character varying (20) | gpa numeric (2,1) | sid integer | sname character varying (20) | gpa numeric (2,1) |
|----|-------------|------------------------------|-------------------|-------------|------------------------------|-------------------|
| 1  | 123         | Amy                          | 3.9               | 654         | Amy                          | 3.9               |
| 2  | 123         | Amy                          | 3.9               | 876         | Irene                        | 3.9               |
| 3  | 123         | Amy                          | 3.9               | 456         | Doris                        | 3.9               |
| 4  | 123         | Amy                          | 3.9               | 123         | Amy                          | 3.9               |
| 5  | 234         | Bob                          | 3.6               | 234         | Bob                          | 3.6               |
| 6  | 345         | Craig                        | 3.5               | 345         | Craig                        | 3.5               |
| 7  | 456         | Doris                        | 3.9               | 654         | Amy                          | 3.9               |
| 8  | 456         | Doris                        | 3.9               | 876         | Irene                        | 3.9               |
| 9  | 456         | Doris                        | 3.9               | 456         | Doris                        | 3.9               |
| 10 | 456         | Doris                        | 3.9               | 123         | Amy                          | 3.9               |
| 11 | 567         | Edward                       | 2.9               | 765         | Jay                          | 2.9               |
| 12 | 567         | Edward                       | 2.9               | 567         | Edward                       | 2.9               |
| 13 | 678         | Fay                          | 3.8               | 678         | Fay                          | 3.8               |
| 14 | 789         | Gary                         | 3.4               | 543         | Craig                        | 3.4               |
| 15 | 789         | Gary                         | 3.4               | 789         | Gary                         | 3.4               |
| 16 | 987         | Helen                        | 3.7               | 987         | Helen                        | 3.7               |
| 17 | 876         | Irene                        | 3.9               | 654         | Amy                          | 3.9               |
| 18 | 876         | Irene                        | 3.9               | 876         | Irene                        | 3.9               |
| 19 | 876         | Irene                        | 3.9               | 456         | Doris                        | 3.9               |
| 20 | 876         | Irene                        | 3.9               | 123         | Amy                          | 3.9               |

2.3.6

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            - student
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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query Editor

Query History

Scratch Pad

```
1 select S1.sID, S1.sName, S1.GPA, S2.sID, S2.sName, S2.GPA
2 from Student S1, Student S2
3 where S1.GPA = S2.GPA and S1.sID <> S2.sID;
```

Data Output

Explain

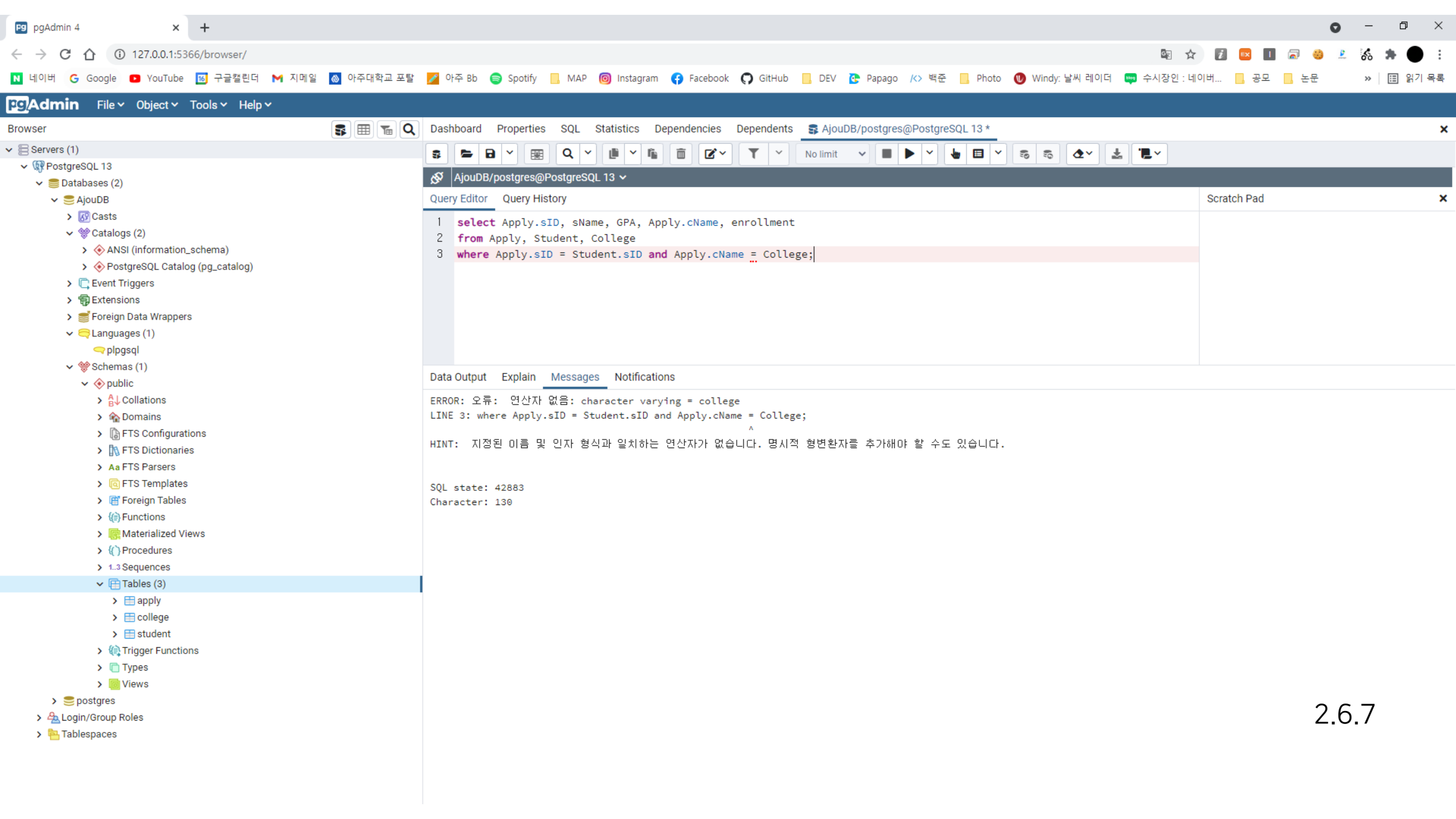
Messages

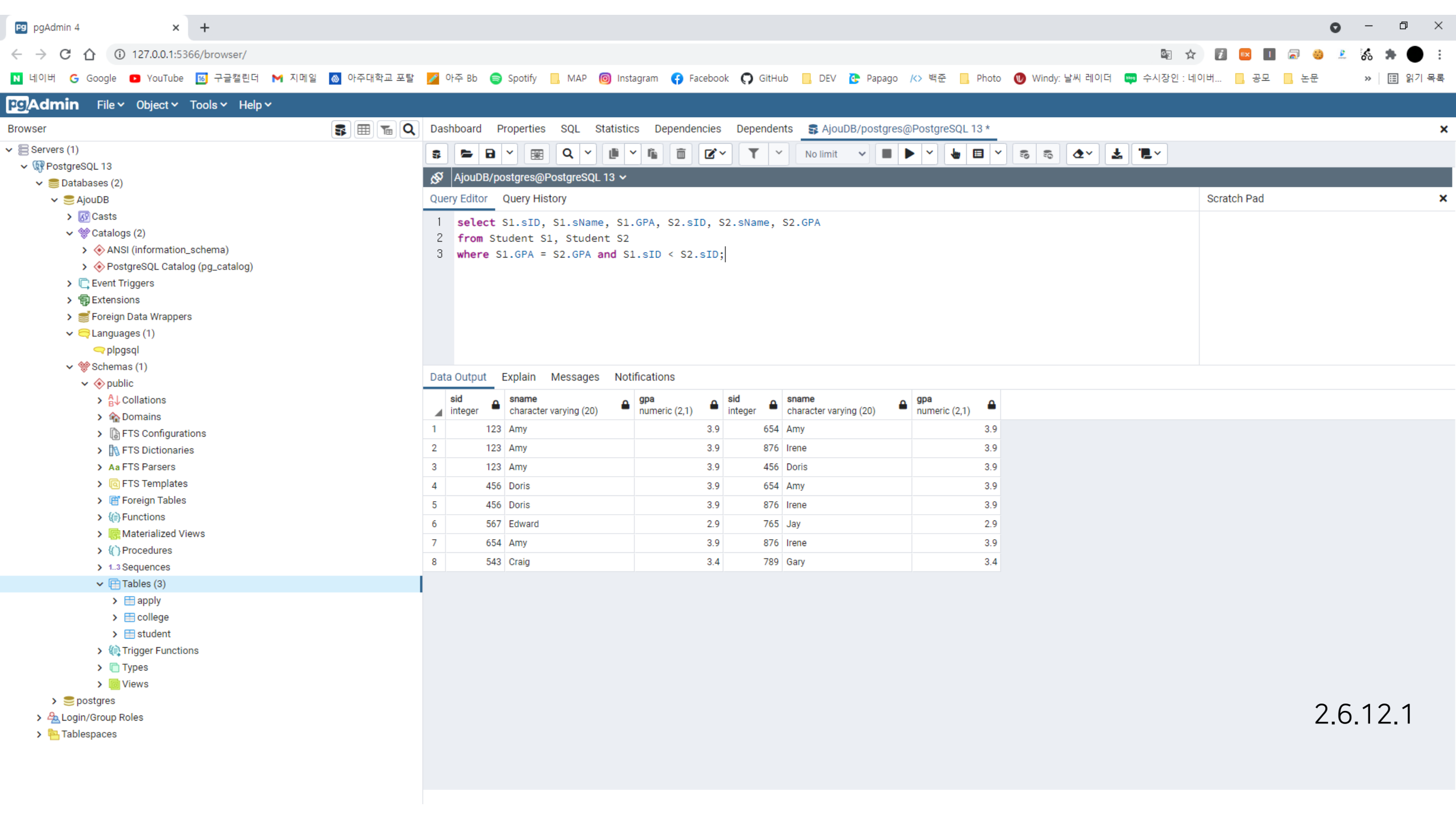
Notifications

|    | sid integer | sname character varying (20) | gpa numeric (2,1) | sid integer | sname character varying (20) | gpa numeric (2,1) |
|----|-------------|------------------------------|-------------------|-------------|------------------------------|-------------------|
| 1  | 123         | Amy                          | 3.9               | 654         | Amy                          | 3.9               |
| 2  | 123         | Amy                          | 3.9               | 876         | Irene                        | 3.9               |
| 3  | 123         | Amy                          | 3.9               | 456         | Doris                        | 3.9               |
| 4  | 456         | Doris                        | 3.9               | 654         | Amy                          | 3.9               |
| 5  | 456         | Doris                        | 3.9               | 876         | Irene                        | 3.9               |
| 6  | 456         | Doris                        | 3.9               | 123         | Amy                          | 3.9               |
| 7  | 567         | Edward                       | 2.9               | 765         | Jay                          | 2.9               |
| 8  | 789         | Gary                         | 3.4               | 543         | Craig                        | 3.4               |
| 9  | 876         | Irene                        | 3.9               | 654         | Amy                          | 3.9               |
| 10 | 876         | Irene                        | 3.9               | 456         | Doris                        | 3.9               |
| 11 | 876         | Irene                        | 3.9               | 123         | Amy                          | 3.9               |
| 12 | 765         | Jay                          | 2.9               | 567         | Edward                       | 2.9               |
| 13 | 654         | Amy                          | 3.9               | 876         | Irene                        | 3.9               |
| 14 | 654         | Amy                          | 3.9               | 456         | Doris                        | 3.9               |
| 15 | 654         | Amy                          | 3.9               | 123         | Amy                          | 3.9               |
| 16 | 543         | Craig                        | 3.4               | 789         | Gary                         | 3.4               |

2.3.9

Successfully run. Total query runtime: 70 msec. 16 rows affected.





2.6.12.1

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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query EditorQuery History

```
1 select S1.sID, S1.sName, S1.GPA, S2.sID, S2.sName, S2.GPA
2 from Student S1 join Student S2 using(GPA)
3 where S1.sID < S2.sID;
```

Scratch Pad

Data OutputExplainMessagesNotifications

|   | sid<br>integer | sname<br>character varying (20) | gpa<br>numeric (2,1) | sid<br>integer | sname<br>character varying (20) | gpa<br>numeric (2,1) |
|---|----------------|---------------------------------|----------------------|----------------|---------------------------------|----------------------|
| 1 | 123            | Amy                             |                      | 654            | Amy                             | 3.9                  |
| 2 | 123            | Amy                             |                      | 876            | Irene                           | 3.9                  |
| 3 | 123            | Amy                             |                      | 456            | Doris                           | 3.9                  |
| 4 | 456            | Doris                           |                      | 654            | Amy                             | 3.9                  |
| 5 | 456            | Doris                           |                      | 876            | Irene                           | 3.9                  |
| 6 | 567            | Edward                          |                      | 765            | Jay                             | 2.9                  |
| 7 | 654            | Amy                             |                      | 876            | Irene                           | 3.9                  |
| 8 | 543            | Craig                           |                      | 789            | Gary                            | 3.4                  |

2.6.12.2

Successfully run. Total query runtime: 85 msec. 8 rows affected.

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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query Editor

Query History

1

select sName, sID, cName, major

2

from Student natural right outer join Apply;

Scratch Pad

Data Output

Explain

Messages

Notifications

|    | sname<br>character varying (20) | sid<br>integer | cname<br>character varying (20) | major<br>character varying (20) |
|----|---------------------------------|----------------|---------------------------------|---------------------------------|
| 1  | Amy                             | 123            | Cornell                         | EE                              |
| 2  | Amy                             | 123            | Berkeley                        | CS                              |
| 3  | Amy                             | 123            | Stanford                        | EE                              |
| 4  | Amy                             | 123            | Stanford                        | CS                              |
| 5  | Bob                             | 234            | Berkeley                        | biology                         |
| 6  | Craig                           | 345            | Cornell                         | EE                              |
| 7  | Craig                           | 345            | Cornell                         | CS                              |
| 8  | Craig                           | 345            | Cornell                         | bioengineering                  |
| 9  | Craig                           | 345            | MIT                             | bioengineering                  |
| 10 | Fay                             | 678            | Stanford                        | history                         |
| 11 | Helen                           | 987            | Berkeley                        | CS                              |
| 12 | Helen                           | 987            | Stanford                        | CS                              |
| 13 | Irene                           | 876            | MIT                             | marine biology                  |
| 14 | Irene                           | 876            | MIT                             | biology                         |
| 15 | Irene                           | 876            | Stanford                        | CS                              |
| 16 | Jay                             | 765            | Cornell                         | psychology                      |
| 17 | Jay                             | 765            | Cornell                         | history                         |
| 18 | Jay                             | 765            | Stanford                        | history                         |
| 19 | Craig                           | 543            | MIT                             | CS                              |

2.6.19

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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*No limit

AjouDB/postgres@PostgreSQL 13 >Query EditorQuery HistoryScratch Pad

```
1 select sName, sID, cName, major
2 from Student full outer join Apply using(sID);
```

Data OutputExplainMessagesNotifications

|    | sname<br>character varying (20) | sid<br>integer | cname<br>character varying (20) | major<br>character varying (20) |
|----|---------------------------------|----------------|---------------------------------|---------------------------------|
| 1  | Amy                             | 123            | Cornell                         | EE                              |
| 2  | Amy                             | 123            | Berkeley                        | CS                              |
| 3  | Amy                             | 123            | Stanford                        | EE                              |
| 4  | Amy                             | 123            | Stanford                        | CS                              |
| 5  | Bob                             | 234            | Berkeley                        | biology                         |
| 6  | Craig                           | 345            | Cornell                         | EE                              |
| 7  | Craig                           | 345            | Cornell                         | CS                              |
| 8  | Craig                           | 345            | Cornell                         | bioengineering                  |
| 9  | Craig                           | 345            | MIT                             | bioengineering                  |
| 10 | Doris                           | 456            | [null]                          | [null]                          |
| 11 | Edward                          | 567            | [null]                          | [null]                          |
| 12 | Fay                             | 678            | Stanford                        | history                         |
| 13 | Gary                            | 789            | [null]                          | [null]                          |
| 14 | Helen                           | 987            | Berkeley                        | CS                              |
| 15 | Helen                           | 987            | Stanford                        | CS                              |
| 16 | Irene                           | 876            | MIT                             | marine biology                  |
| 17 | Irene                           | 876            | MIT                             | biology                         |
| 18 | Irene                           | 876            | Stanford                        | CS                              |
| 19 | Jay                             | 765            | Cornell                         | psychology                      |
| 20 | Jay                             | 765            | Cornell                         | history                         |

2.6.20

Successfully run. Total query runtime: 65 msec. 23 rows affected.

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  - postgres
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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query Editor

Query History

```
1 select sName, sID, cName, major
2 from Student left outer join Apply using(sID)
3 union
4 select sName, sID, cName, major
5 from Student right outer join Apply using(sID);
```

Scratch Pad

Data Output

Explain

Messages

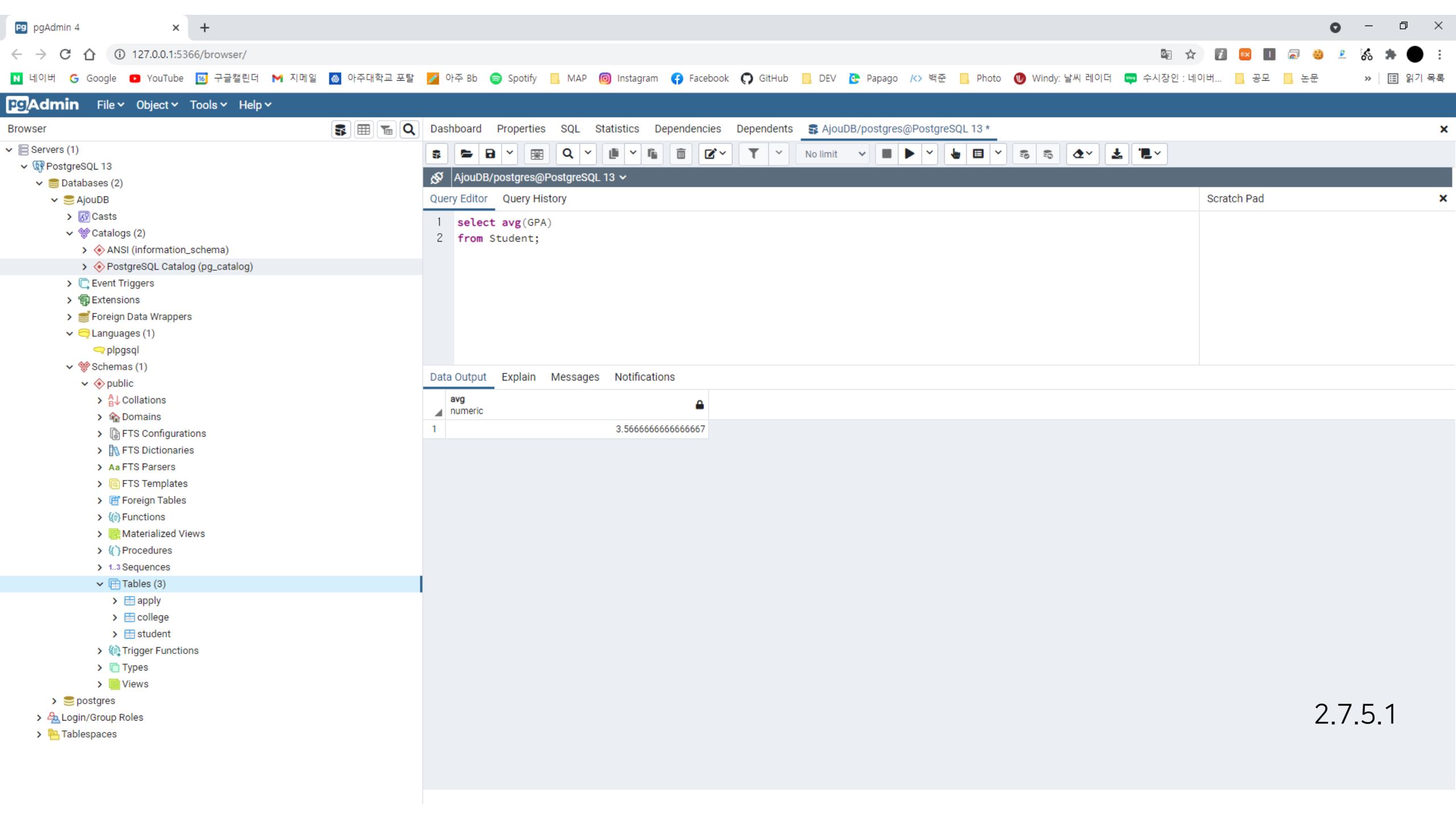
Notifications

|    | sname<br>character varying (20) | sid<br>integer | cname<br>character varying (20) | major<br>character varying (20) |
|----|---------------------------------|----------------|---------------------------------|---------------------------------|
| 1  | Jay                             | 765            | Cornell                         | psychology                      |
| 2  | Amy                             | 123            | Stanford                        | EE                              |
| 3  | Irene                           | 876            | MIT                             | marine biology                  |
| 4  | Irene                           | 876            | MIT                             | biology                         |
| 5  | Craig                           | 345            | Cornell                         | EE                              |
| 6  | Amy                             | 654            | [null]                          | [null]                          |
| 7  | Amy                             | 123            | Berkeley                        | CS                              |
| 8  | Amy                             | 123            | Stanford                        | CS                              |
| 9  | Doris                           | 456            | [null]                          | [null]                          |
| 10 | Bob                             | 234            | Berkeley                        | biology                         |
| 11 | Helen                           | 987            | Stanford                        | CS                              |
| 12 | Edward                          | 567            | [null]                          | [null]                          |
| 13 | Craig                           | 543            | MIT                             | CS                              |
| 14 | Jay                             | 765            | Cornell                         | history                         |
| 15 | Jay                             | 765            | Stanford                        | history                         |
| 16 | Amy                             | 123            | Cornell                         | EE                              |
| 17 | Craig                           | 345            | Cornell                         | CS                              |
| 18 | Craig                           | 345            | MIT                             | bioengineering                  |
| 19 | Helen                           | 987            | Berkeley                        | CS                              |
| 20 | Enu                             | 678            | Stanford                        | history                         |

2.6.21

Successfully run. Total query runtime: 74 msec. 23 rows affected.





2.7.5.1

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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*AjouDB/postgres@PostgreSQL 13Query EditorQuery HistoryScratch Pad

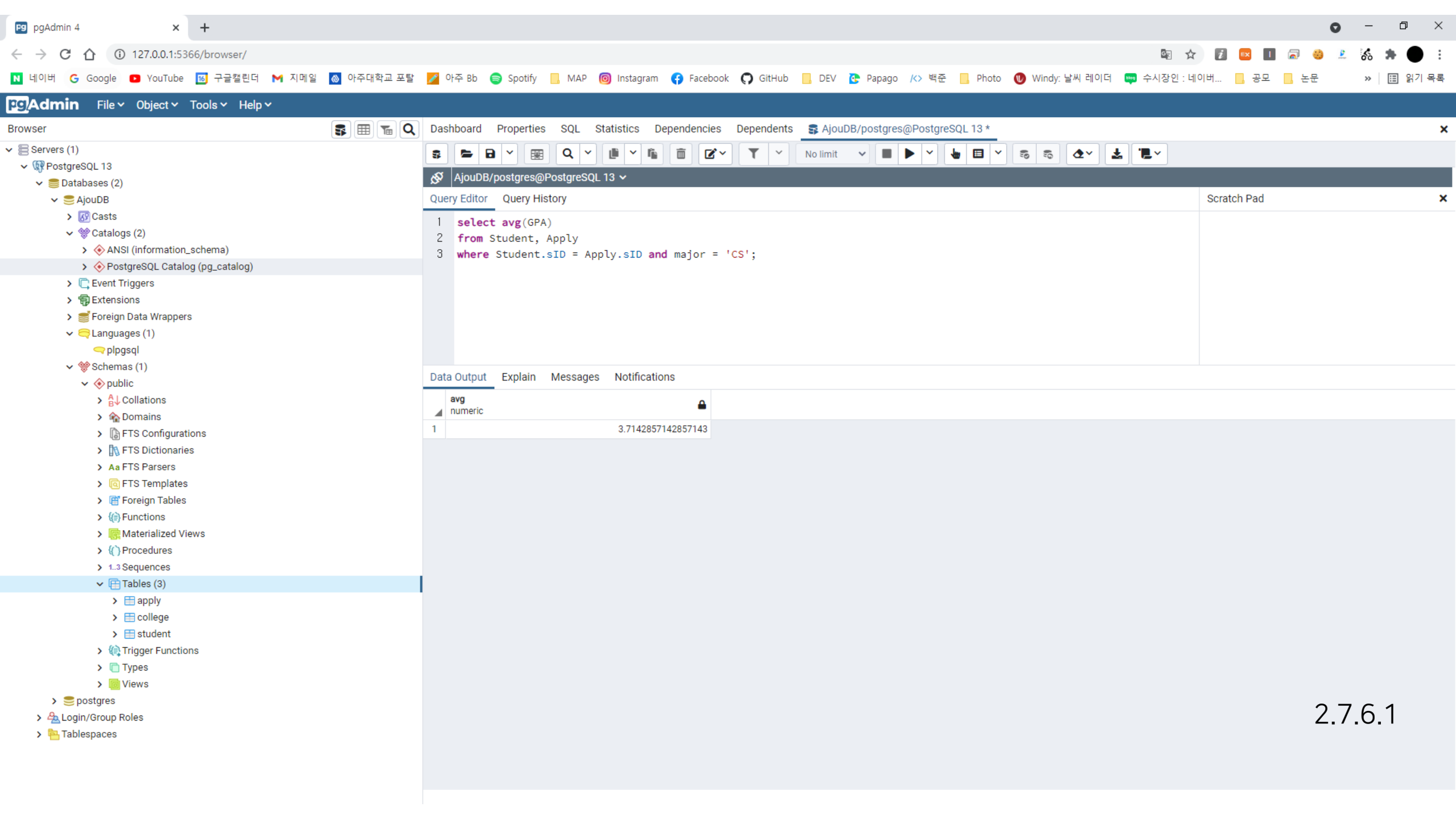
```
1 select min(GPA)
2 from Student, Apply
3 where Student.sID = Apply.sID and major = 'CS';
```

Data OutputExplainMessagesNotifications

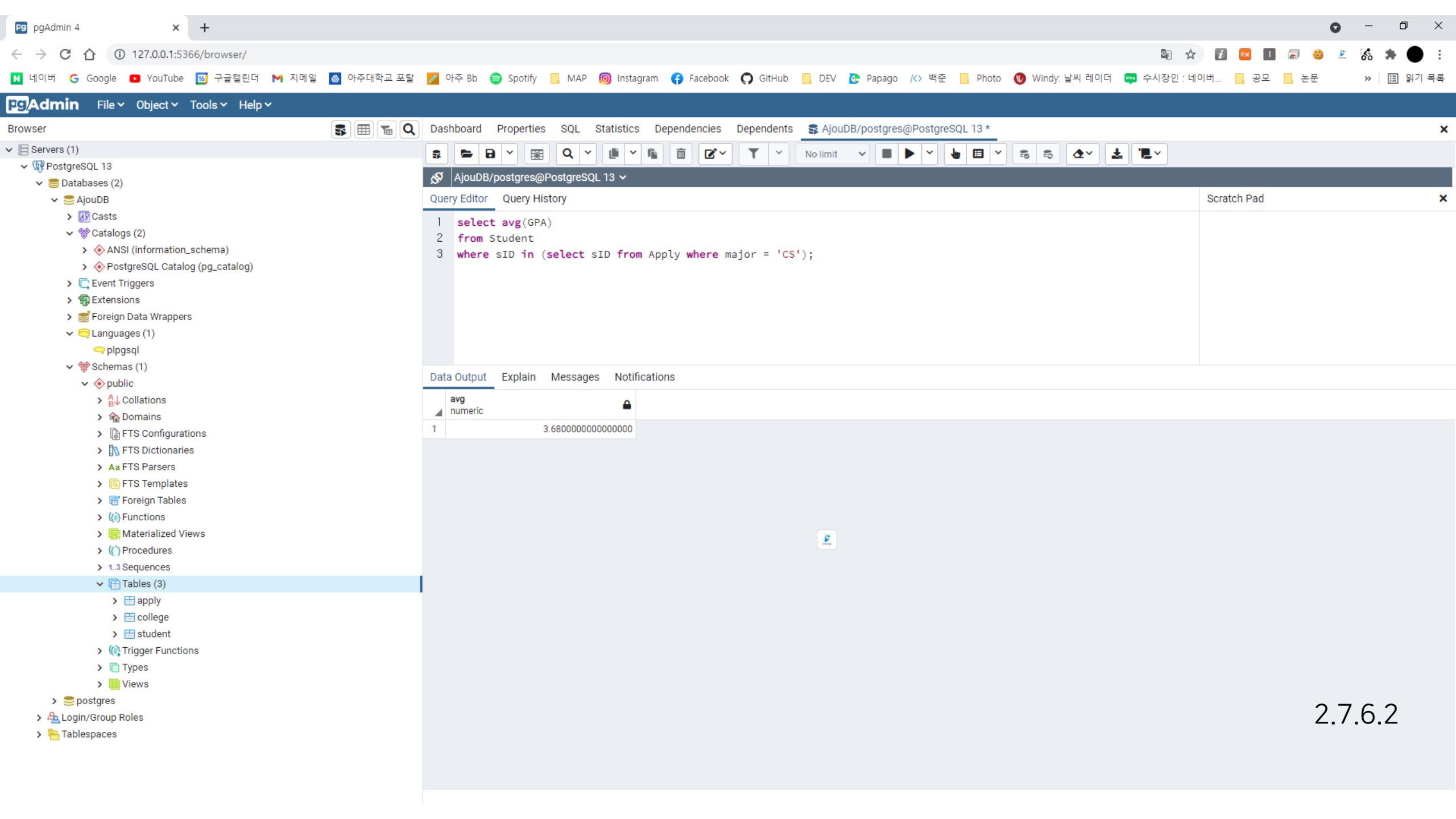
|   | min | numeric |
|---|-----|---------|
| 1 |     | 3.4     |

2.7.5.2

Successfully run. Total query runtime: 94 msec. 1 rows affected.



2.7.6.1



Dashboard

Properties

SQL

Statistics

Dependencies

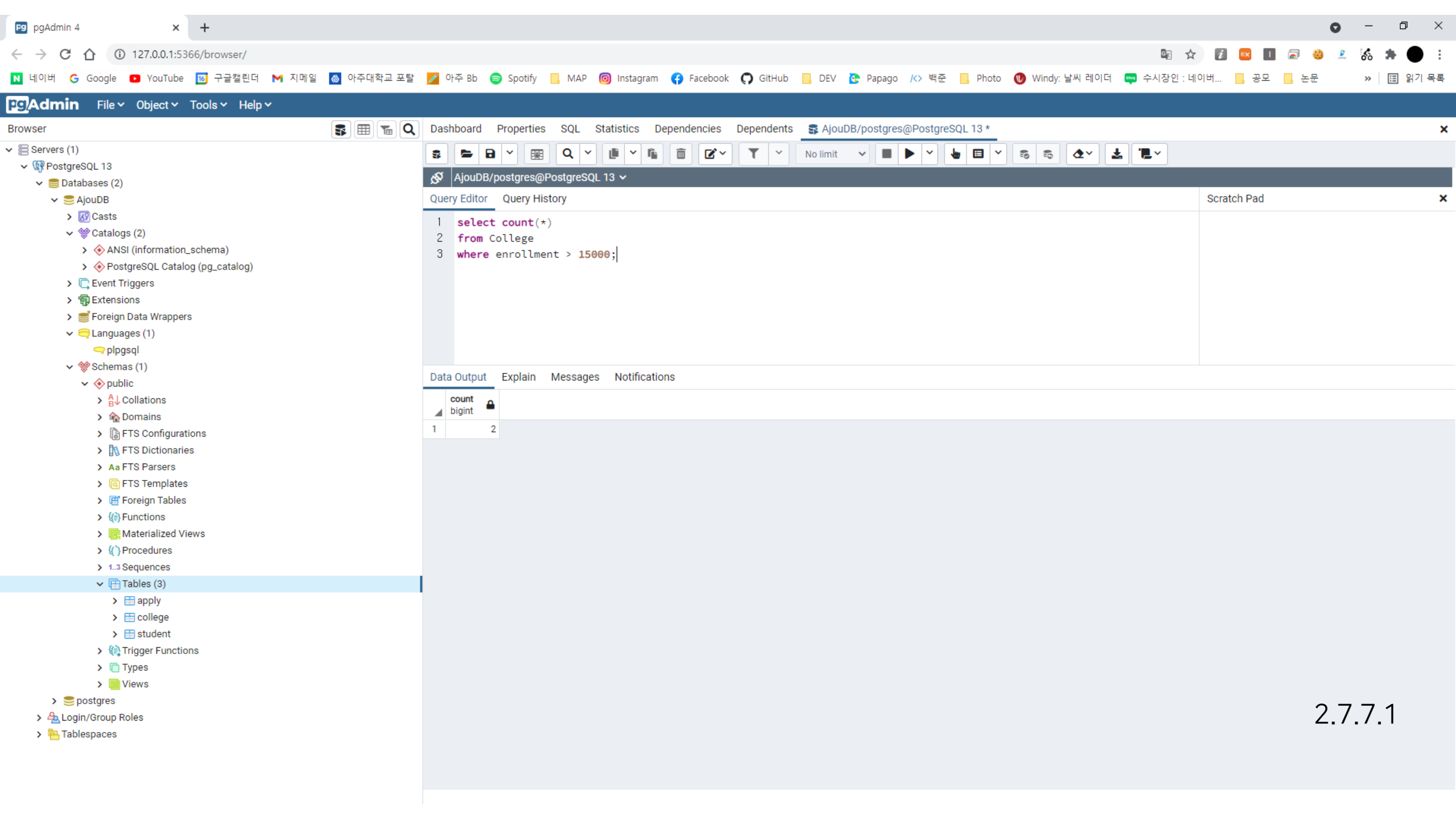
Dependents

AjouDB/postgres@PostgreSQL 13 \*

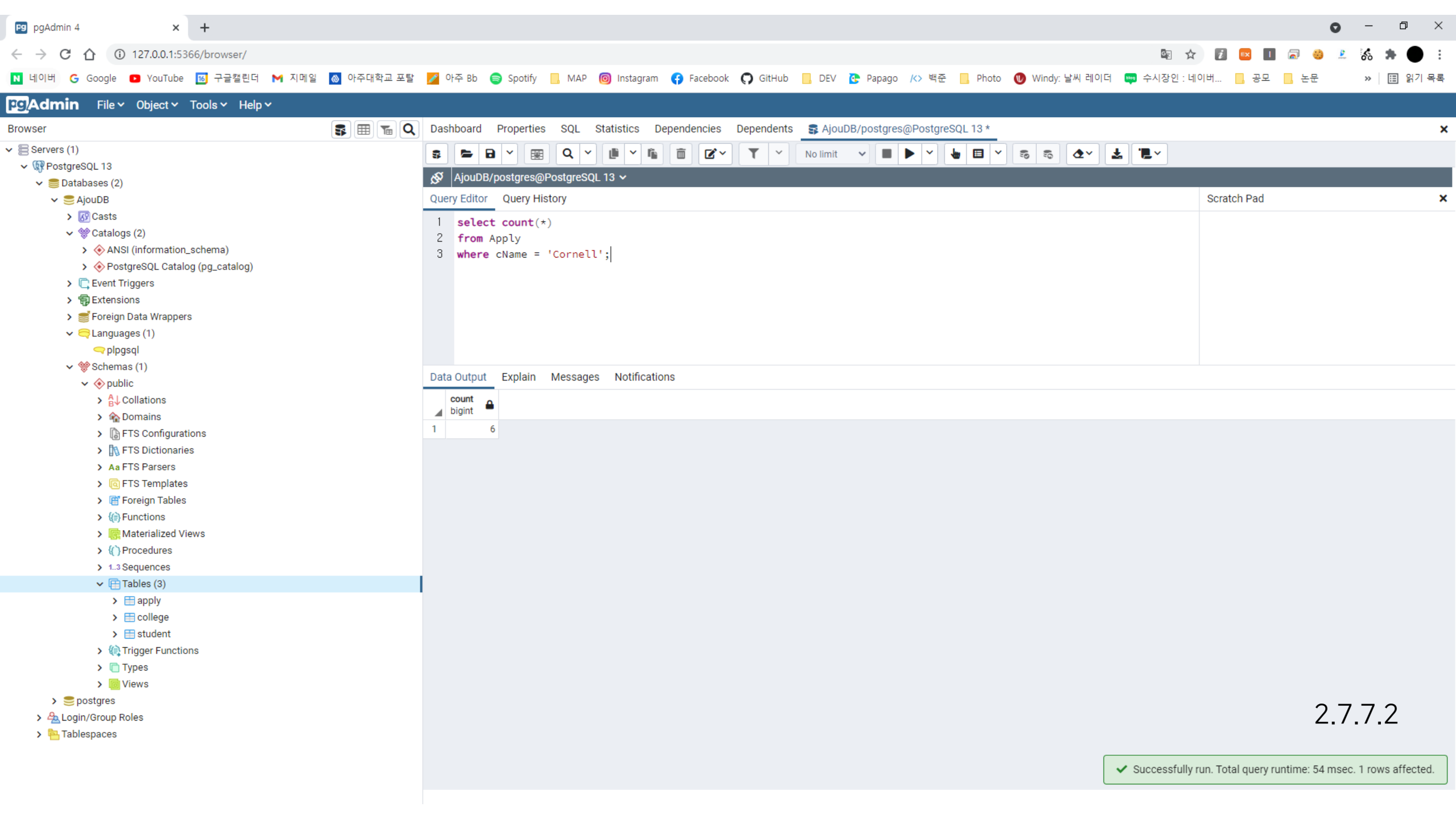


AjouDB/postgres@PostgreSQL 13





2.7.7.1



2.7.7.2

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AjouDB/postgres@PostgreSQL 13

Query EditorQuery HistoryScratch Pad

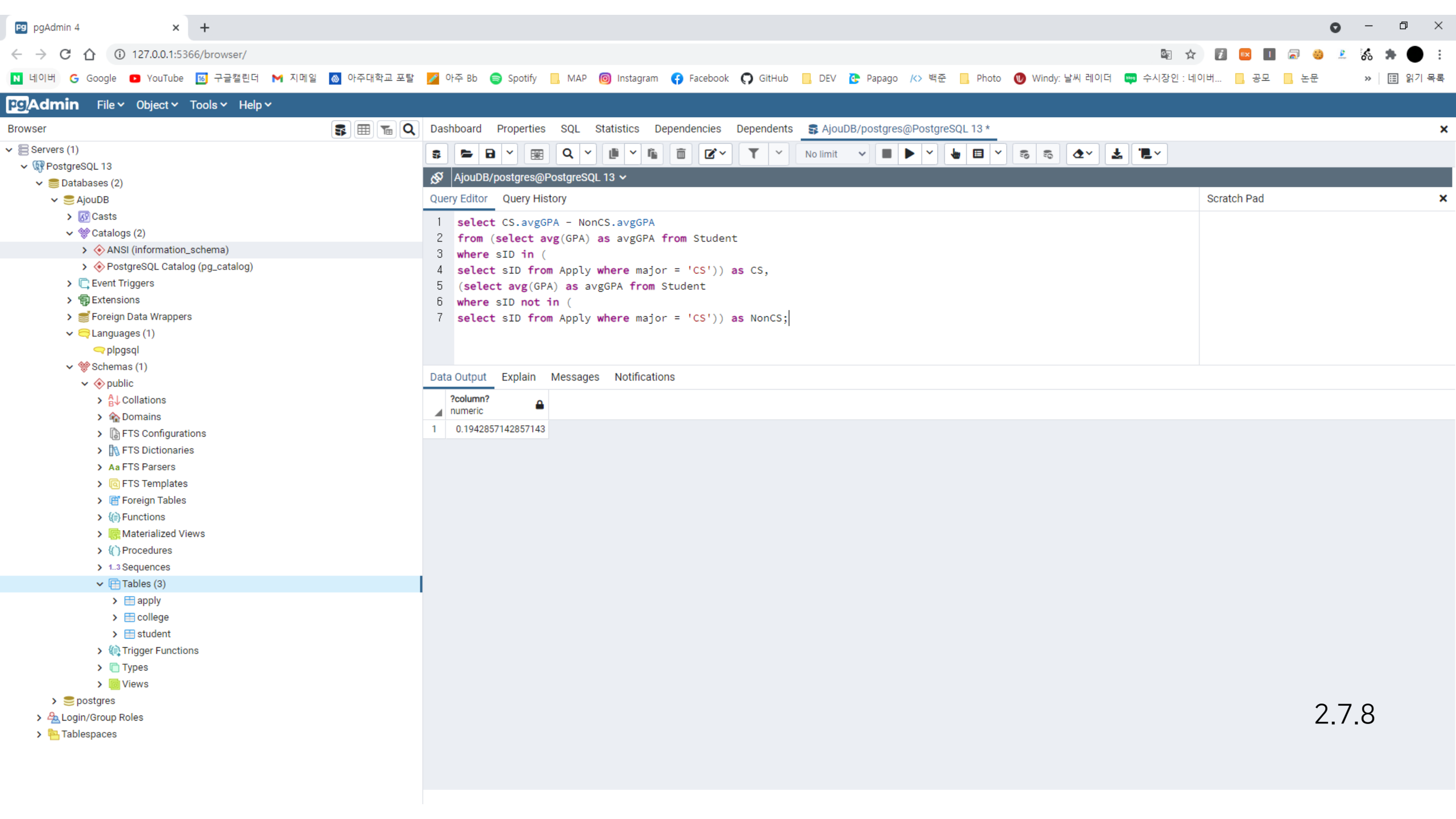
1select count(distinct sID)2from Apply3where cName = 'Cornell';

Data OutputExplainMessagesNotifications

|   | count | bigint |
|---|-------|--------|
| 1 |       | 3      |

2.7.7.3

Successfully run. Total query runtime: 80 msec. 1 rows affected.



2.7.8



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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

AjouDB/postgres@PostgreSQL 13

Query EditorQuery History

```
1 select cName, count(*)
2 from Apply
3 group by cName;
```

Data OutputExplainMessagesNotifications

|   | cname<br>character varying (20) | count<br>bigint |  |
|---|---------------------------------|-----------------|--|
| 1 | Cornell                         | 6               |  |
| 2 | MIT                             | 4               |  |
| 3 | Berkeley                        | 3               |  |
| 4 | Stanford                        | 6               |  |

Scratch Pad

2.7.12.1

Successfully run. Total query runtime: 82 msec. 4 rows affected.

data-16185942451....csv모두 표시



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pgAdminFileObjectToolsHelp

BrowserServers (1)PostgreSQL 13Databases (2)AjouDBCatalogs (2)ANSI (information\_schema)PostgreSQL Catalog (pg\_catalog)Event TriggersExtensionsForeign Data WrappersLanguages (1)plpgsqlSchemas (1)publicCollationsDomainsFTS ConfigurationsFTS DictionariesFTS ParsersFTS TemplatesForeign TablesFunctionsMaterialized ViewsProcedures1.3 SequencesTables (3)applycollegestudentTrigger FunctionsTypesViewspostgresLogin/Group RolesTablespaces

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*No limit

AjouDB/postgres@PostgreSQL 13 \*Query EditorQuery HistoryScratch Pad

```
1 select cName, major, min(GPA), max(GPA)
2 from Student, Apply
3 where Student.sID = Apply.sID
4 group by cName, major;
```

Data OutputExplainMessagesNotifications

|    | cname<br>character varying (20) | major<br>character varying (20) | min<br>numeric | max<br>numeric |
|----|---------------------------------|---------------------------------|----------------|----------------|
| 1  | Cornell                         | CS                              | 3.5            | 3.5            |
| 2  | Cornell                         | history                         | 2.9            | 2.9            |
| 3  | Cornell                         | psychology                      | 2.9            | 2.9            |
| 4  | MIT                             | bioengineering                  | 3.5            | 3.5            |
| 5  | Cornell                         | bioengineering                  | 3.5            | 3.5            |
| 6  | Stanford                        | history                         | 2.9            | 3.8            |
| 7  | MIT                             | biology                         | 3.9            | 3.9            |
| 8  | Stanford                        | EE                              | 3.9            | 3.9            |
| 9  | MIT                             | marine biology                  | 3.9            | 3.9            |
| 10 | MIT                             | CS                              | 3.4            | 3.4            |
| 11 | Stanford                        | CS                              | 3.7            | 3.9            |
| 12 | Berkeley                        | CS                              | 3.7            | 3.9            |
| 13 | Berkeley                        | biology                         | 3.6            | 3.6            |
| 14 | Cornell                         | EE                              | 3.5            | 3.9            |

2.7.13

Successfully run. Total query runtime: 75 msec. 14 rows affected.

data-16185942451....csv모두 표시

pgAdmin 4

127.0.0.1:5366/browser/

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BrowserServers (1)PostgreSQL 13Databases (2)AjouDBCatalogs (2)ANSI (information\_schema)PostgreSQL Catalog (pg\_catalog)Event TriggersExtensionsForeign Data WrappersLanguages (1)plpgsqlSchemas (1)publicCollationsDomainsFTS ConfigurationsFTS DictionariesAa FTS ParsersFTS TemplatesForeign TablesFunctionsMaterialized ViewsProcedures1.3 SequencesTables (3)applycollegestudentTrigger FunctionsTypesViewspostgresLogin/Group RolesTablespaces

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

AjouDB/postgres@PostgreSQL 13

Query EditorQuery History

```
1 select max(mx-mn)
2 from (select cName, major, min(GPA) as mn, max(GPA) as mx
3 from Student, Apply
4 where Student.sID = Apply.sID
5 group by cName, major) M;
```

Data Output

|   | max     |     |
|---|---------|-----|
|   | numeric |     |
| 1 |         | 0.9 |

ExplainMessagesNotifications

Scratch Pad

data-16185942451....csv모두 표시

2.7.14

Successfully run. Total query runtime: 96 msec. 1 rows affected.

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BrowserServers (1)PostgreSQL 13Databases (2)AjouDBCatalogs (2)ANSI (information\_schema)PostgreSQL Catalog (pg\_catalog)Event TriggersExtensionsForeign Data WrappersLanguages (1)plpgsqlSchemas (1)publicCollationsDomainsFTS ConfigurationsFTS DictionariesAa FTS ParsersFTS TemplatesForeign TablesFunctionsMaterialized ViewsProcedures1.3 SequencesTables (3)applycollegestudentTrigger FunctionsTypesViewspostgresLogin/Group RolesTablespaces

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query EditorQuery History

```
1 select Student.sID, count(distinct cName)
2 from Student, Apply
3 where Student.sID = Apply.sID
4 group by Student.sID;
```

Scratch Pad

Data OutputExplainMessagesNotifications

|   | sid     | count  |
|---|---------|--------|
|   | integer | bigint |
| 1 | 123     | 3      |
| 2 | 234     | 1      |
| 3 | 345     | 2      |
| 4 | 543     | 1      |
| 5 | 678     | 1      |
| 6 | 765     | 2      |
| 7 | 876     | 2      |
| 8 | 987     | 2      |

2.7.15

Successfully run. Total query runtime: 72 msec. 8 rows affected.

모두 표시

pgAdmin 4

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DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*No limit

AjouDB/postgres@PostgreSQL 13Query EditorQuery HistoryScratch Pad

```
1 select Student.sID, sName, count(distinct cName)
2 from Student, Apply
3 where Student.sID = Apply.sID
4 group by Student.sID;
```

Data OutputExplainMessagesNotifications

ERROR: 오류: column "student.sname" 는 반드시 GROUP BY 절내에 있어야 하든지 또는 집계 함수 내에서 사용되어야 한다  
LINE 1: select Student.sID, sName, count(distinct cName)  
^  
  
SQL state: 42803  
Character: 21

2.7.16

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pgAdminFileObjectToolsHelp

Browser

Servers (1)

- PostgreSQL 13
  - Databases (2)
    - AjouDB
      - Casts
      - Catalogs (2)
        - ANSI (information\_schema)
        - PostgreSQL Catalog (pg\_catalog)
      - Event Triggers
      - Extensions
      - Foreign Data Wrappers
      - Languages (1)
        - plpgsql
      - Schemas (1)
        - public
          - Collations
          - Domains
          - FTS Configurations
          - FTS Dictionaries
          - FTS Parsers
          - FTS Templates
          - Foreign Tables
          - Functions
          - Materialized Views
          - Procedures
          - Sequences
          - Tables (3)
            - apply
            - college
            - student
          - Trigger Functions
          - Types
          - Views

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query Editor

Query History

Scratch Pad

```
1 select Student.sID, sName, count(distinct cName), cName
2 from Student, Apply
3 where Student.sID = Apply.sID
4 group by Student.sID;
```

Data Output

Explain

Messages

Notifications

ERROR: 오류: column "student.sname" 는 반드시 GROUP BY 절내에 있어야 하든지 또는 집계 함수 내에서 사용되어야 한다
LINE 1: select Student.sID, sName, count(distinct cName), cName
 ^

SQL state: 42803
Character: 21

2.7.17

pgAdmin 4

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pgAdminFileObjectToolsHelp

BrowserServers (1)PostgreSQL 13Databases (2)AjouDB> Casts> Catalogs (2)> ANSI (information\_schema)> PostgreSQL Catalog (pg\_catalog)> Event Triggers> Extensions> Foreign Data Wrappers> Languages (1)plpgsql> Schemas (1)> public> Collations> Domains> FTS Configurations> FTS Dictionaries> Aa FTS Parsers> FTS Templates> Foreign Tables> Functions> Materialized Views> Procedures> 1.3 Sequences> Tables (3)> apply> college> student> Trigger Functions> Types> Views> postgres> Login/Group Roles> Tablespaces

DashboardPropertiesSQLStatisticsDependenciesDependentsAjouDB/postgres@PostgreSQL 13 \*

Query EditorQuery History

```
1 select Student.sID, count(distinct cName)
2 from Student, Apply
3 where Student.sID = Apply.sID
4 group by Student.sID
5 union
6 select sID, 0
7 from Student
8 where sID not in (select sID from Apply);
```

Data OutputExplainMessagesNotifications

|    | sid integer | count bigint |
|----|-------------|--------------|
| 1  | 234         | 1            |
| 2  | 654         | 0            |
| 3  | 543         | 1            |
| 4  | 678         | 1            |
| 5  | 987         | 2            |
| 6  | 765         | 2            |
| 7  | 789         | 0            |
| 8  | 456         | 0            |
| 9  | 123         | 3            |
| 10 | 567         | 0            |
| 11 | 345         | 2            |
| 12 | 876         | 2            |

Scratch Pad

2.7.18

Successfully run. Total query runtime: 49 msec. 12 rows affected.

data-16185942451....csv

모두 표시