

CS586—funding colleges through sport and foreign influence, being mainly a series of exceedingly tenuous connections

Navya Sri Ambati & John O Brickley

This project gathers some data about US schools—“schools” here including 2-year and 4-year colleges, universities, and some trade schools—during the year 2014. Specifically, we have collected the 2014 data for foreign gifts to US schools and college sports financing, as well as the *College scorecard* data for that year. Lest they be interpreted as our having some particular axe to grind, the datasets were selected by combing through the *Data is plural* archives¹ as collected by Jeremy Singer-Vine, searching for anything to do with US colleges and universities. As a consequence of this somewhat scattershot approach to dataset collection, the questions that can be asked using our database aren’t quite as interesting as we would’ve preferred. Given the chance to do it all again, we probably would’ve focused on importing as near to the entirety of the *College scorecard* data as we could manage since that data is already provided in a consistent format and is, as far as we know, as close to a complete picture of the higher education system in the US as is currently available. As it stand, our questions concern the kinds of things our database allow us to ask questions about—as is always the case, but to somewhat more jarring effect here than you may be accustomed to.

Since the submission form on “Canvas” does not allow files other than doc, docX, and PDF, we have made the repository we used to coordinate our work publicly available at https://github.com/shushcat/cs586-group_project. There you will find our datasets under the `datasets/` directory, our table and view creation statement in the `colleges_2014.sql` file, and our queries in `queries.sql`. Two further notes are in order. First, our table creation statements use relative paths, so you should be able to execute them in place as long as the rest of the repository’s directory structure is preserved. Second, owing to our early experiments with some very large datasets, the repository is very large. Accordingly, you’ll probably want to download a zip archive of the repository, available under the green “Code” button on the right-ish side of the screen.

¹<https://www.data-is-plural.com/>

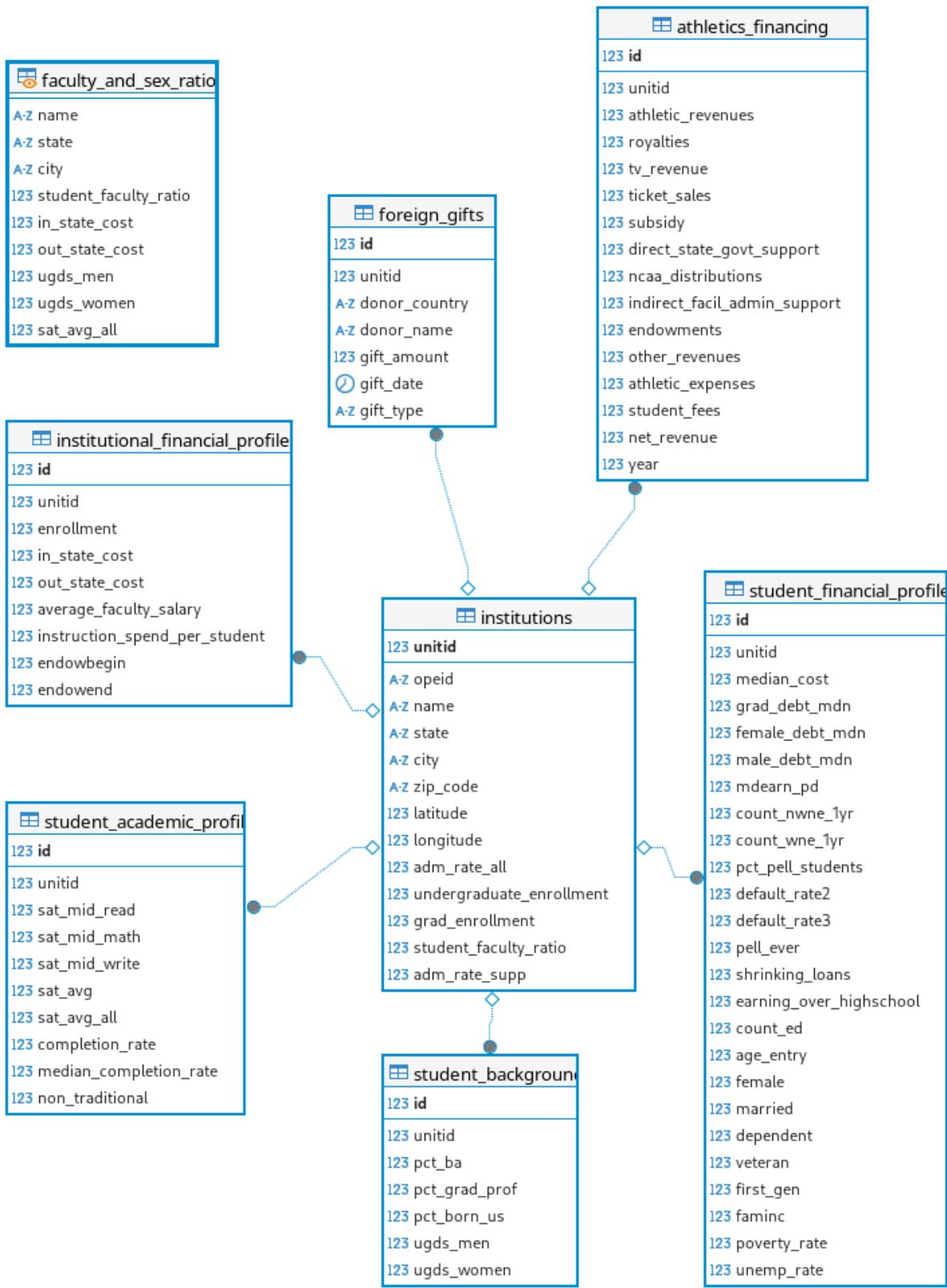


Figure 1: Table relationships

Table-creation statements

```
CREATE TABLE colleges_2014.institutions ( --from `college_scorecard`  
    unitid int PRIMARY KEY, --UNITID  
    opeid varchar(16), --OPEID  
    name varchar(128) NOT NULL, --INSTNM  
    state varchar(2), --STABBR  
    city varchar(64), --CITY  
    zip_code varchar(10), --ZIP  
    latitude float, --Latitude  
    longitude float, --Longitude  
    adm_rate_all float, --Admission rate for all campuses rolled up to the 6-  
    digit OPE ID  
    undergraduate_enrollment integer, --UGDS; number of undergraduate students  
    grad_enrollment integer, --GRADS; number of graduate students  
    student_faculty_ratio float, --STUFACR; undergraduate student to  
    instructional faculty ratio  
    adm_rate_supp float --Admission rate, suppressed for n<30  
);  
  
SELECT * FROM colleges_2014.institutions;  
unitid | opeid | name | state...  
-----+-----+-----+-----  
100654 | 00100200 | Alabama A & M University | AL ...  
100663 | 00105200 | University of Alabama at Birmingham | AL ...  
100690 | 02503400 | Amridge University | AL ...  
100706 | 00105500 | University of Alabama in Huntsville | AL ...  
100724 | 00100500 | Alabama State University | AL ...  
...  
(7766 rows)  
  
CREATE TABLE colleges_2014.student_backgrounds ( --from `college_scorecard`  
    id SERIAL PRIMARY KEY,  
    unitid int REFERENCES colleges_2014.institutions(unitid), --UNITID  
    pct_ba float, --Percent of people over age 25 from students' zip codes with  
    bachelor's degrees.  
    pct_grad_prof float, --Percent of people over age 25 from students' zip codes  
    with professional degrees.  
    pct_born_us float, --Percent of people from students' zip codes that were  
    born in the US.  
    ugds_men float, --Total share of enrollment of undergraduate degree-seeking  
    students who are men.  
    ugds_women float --Total share of enrollment of undergraduate degree-seeking  
    students who are women.  
);  
  
SELECT * FROM colleges_2014.student_backgrounds LIMIT 5;  
id | unitid | pct_ba | pct_grad_prof | pct_born_us | ugds_men | ugds_women...  
---+-----+-----+-----+-----+-----+-----  
1 | 100654 | | | | 0.4831 | 0.5169...
```

2	100663				0.4169	0.5831...
3	100690				0.3986	0.6014...
4	100706				0.5733	0.4267...
5	100724				0.3877	0.6123...

...

(7766 rows)

```

CREATE TABLE colleges_2014.student_academic_profile ( --from `college_scorecard`
    id SERIAL PRIMARY KEY,
    unitid int REFERENCES colleges_2014.institutions(unitid), --UNITID
    sat_mid_read float, --SATVRMID
    sat_mid_math float, --SATMTMID
    sat_mid_write float, --SATWRMID
    sat_avg float, --SAT_AVG
    sat_avg_all float, --Average SAT equivalent score of students admitted for
    all campuses rolled up to the 6-digit OPE ID
    completion_rate float, --C200_4_POOLLED_SUPP
    median_completion_rate float, --MDCOMP_ALL; overall median of completion rate
    non_traditional float --UG25ABV; percentage of undergraduates aged 25 and
    above
);

```

```

SELECT * FROM colleges_2014.student_academic_profile LIMIT 5;

```

id	unitid	sat_mid_read	sat_mid_math	sat_mid_write	sat_avg	...
1	100654	424	420	420	827	...
2	100663	570	565		1107	...
3	100690					...
4	100706	595	590		1219	...
5	100724	425	430		851	...

...

(7766 rows)

```

CREATE TABLE colleges_2014.student_financial_profile ( --from `college_scorecard`
    id SERIAL PRIMARY KEY,
    unitid int REFERENCES colleges_2014.institutions(unitid), --UNITID
    median_cost float, --MDCOST_ALL; overall median for average net price.
    grad_debt_mdn float, --The median debt for students who have completed.
    female_debt_mdn float, --The median debt for female students.
    male_debt_mdn float, --The median debt for male students.
    mdearn_pd float, --Median earnings of students working and not enrolled 10
    years after entry.
    count_nwne_1yr float, --Number of graduates working and not enrolled 1 year
    after completing.
    count_wne_1yr float, --Number of graduates not working and not enrolled 1
    year after completing.
    pct_pell_students float, --PCTPELL
    default_rate2 float, --CDR2
    default_rate3 float, --CDR3
    pell_ever float, --PELL_EVER; share of students who received a Pell Grant

```

```

while in school.
    shrinking_loans float, --RPY_7YR_RT
    earning_over_highschool float, --GT_THRESHOLD_P11; students earning more than
a high school graduate 11 years after entry.
    count_ed integer, --Count of students in the earnings cohort.
    age_entry float, --Average age of entry.
    female float, --Share of female students.
    married float, --Share of married students.
    dependent float, --Share of dependent students.
    veteran float, --Share of veteran students.
    first_gen float, --Share of first-generation students.
    faminc float, --Average family income.
    poverty_rate float, --Poverty rate, via Census data.
    unemp_rate float --Unemployment rate, via Census data.
);

SELECT male_debt_mdn FROM colleges_2014.student_financial_profile limit 5;
id | unitid | median_cost | grad_debt_mdn | female_debt_mdn | male_debt_mdn...
---+-----+-----+-----+-----+-----+...
1 | 100654 |           | 32750 | 14250 | 12000 | ...
2 | 100663 |           | 20750 | 12537.5 | 12500 | ...
3 | 100690 |           | 22829 | 8481 | 7125 | ...
4 | 100706 |           | 23250 | 15000 | 13500 | ...
5 | 100724 |           | 32500 | 13228 | 11250 | ...
...
(7766 rows)

CREATE TABLE colleges_2014.institutional_financial_profile ( --from
`college_scorecard`
    id SERIAL PRIMARY KEY,
    unitid int REFERENCES colleges_2014.institutions(unitid),
    in_state_cost integer, --TUITIONFEE_IN
    out_state_cost integer, --TUITIONFEE_OUT
    average_faculty_salary integer, --AVGFACSL; average faculty salary
    instruction_spend_per_student int, --INEXPFT
    endowbegin decimal(15, 2), --Value of school's endowment at the beginning of
the fiscal year
    endowend decimal(15, 2) --Value of school's endowment at the end of the
fiscal year
);

SELECT * FROM colleges_2014.institutional_financial_profile;
id | unitid | in_state_cost | out_state_cost | average_faculty_salary ...
---+-----+-----+-----+-----+...
1 | 100654 | 9096 | 16596 | 6892 | ...
2 | 100663 | 7510 | 17062 | 9957 | ...
3 | 100690 | 6900 | 6900 | 3430 | ...
4 | 100706 | 9158 | 21232 | 9302 | ...
5 | 100724 | 8720 | 15656 | 6609 | ...

```

```

...
(7766 rows)

CREATE TABLE colleges_2014.foreign_gifts ( --from `foreign_gifts`
    id SERIAL PRIMARY KEY,
    unitid int REFERENCES colleges_2014.institutions(unitid),
    donor_country varchar(50), --"Country of Gifto"
    donor_name varchar(100), --"Gifto Name"
    gift_amount decimal(16, 2), --"Foreign Gift Amount"
    gift_date date, --"Foreign Gift Received"
    gift_type varchar(32) --"Gift Type"
);

SELECT * FROM colleges_2014.foreign_gifts;
+-----+-----+-----+-----+-----+
| id | unitid | donor_country | donor_name | gift_amount |
+-----+-----+-----+-----+-----+
| 1 | 104151 | QATAR | RasGas Company Limited | 12126.00 ... |
| 2 | 104151 | JAPAN | Asia University | 5763.00 ... |
| 3 | 104151 | JAPAN | Asia University | 121023.00 ... |
| 4 | 104151 | CANADA | University of Western Ontario | 136381.00 ... |
| 5 | 104151 | VIETNAM | Intel Products Vietnam Co., Ltd. | 379106.00 ... |
+-----+-----+-----+-----+-----+
...
(3584 rows)

CREATE TABLE colleges_2014.athletics_financing ( --from
`college_athletics_financing`
    id SERIAL PRIMARY KEY,
    unitid int REFERENCES colleges_2014.institutions(unitid), --UNITID
    athletic_revenues decimal(15, 2), --Total revenue.
    royalties bigint, --Revenue from royalties.
    tv_revenue bigint, --Revenue from radio and television broadcasts.
    ticket_sales bigint, --Revenue received for sales of admissions to athletics
events.
    subsidy int, --Direct state and institution subsidies.
    direct_state_govt_support bigint, --Direct support from state government.
    ncaa_distributions bigint, --Revenue received from participation in games.
    indirect_facil_admin_support bigint, --Facilities and services provided by
the institution but not charged to athletics.
    endowments bigint, --Revenue from endowments and investments.
    other_revenues bigint, --Other revenues.
    athletic_expenses decimal(15, 2), --Total expenses.
    student_fees bigint, --Student fees for college athletics; reference from
`student_financial_profile`.
    net_revenue bigint, --Athletic revenues minus athletic expenses.
    year int DEFAULT 2014 CHECK (year = 2014)
);

SELECT * FROM colleges_2014.athletics_financing;
+-----+-----+-----+-----+-----+
| id | unitid | athletic_revenues | royalties | tv_revenue | ticket_sales |
+-----+-----+-----+-----+-----+-----+

```

1		100751		153234273.00		15471366		13662940		37219343	...
2		100858		113716004.00		5275554		6357837		29833441	...
3		104151		74729269.00		10148054		0		12885134	...
4		104179		99911034.00		6308525		0		14931449	...
5		106397		96793972.00		11813916		0		34284318	...
...											

(201 rows)

View-creation statement

This view summarizes the ratios of students-to-faculty and males-to-females at each university that reported that data. We did not revise this view for the final deliverable.

```

SELECT i.name, i.state, i.city, i.student_faculty_ratio,
       ifp.in_state_cost, ifp.out_state_cost,
       sb.ugds_men, sb.ugds_women,
       sap.sat_avg_all
FROM colleges_2014.institutions AS i
JOIN colleges_2014.student_backgrounds AS sb ON i.unitid = sb.unitid
JOIN colleges_2014.student_academic_profile AS sap ON sb.unitid = sap.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON sap.unitid =
ifp.unitid
WHERE sap.sat_avg_all IS NOT NULL
      AND i.student_faculty_ratio IS NOT NULL
      AND ifp.in_state_cost IS NOT NULL
      AND ifp.out_state_cost IS NOT NULL;

```

```
SELECT * FROM colleges_2014.faculty_and_sex_ratios limit 5;
```

name	...	student_faculty_ratio	...
Alabama A & M University	...	20	...
University of Alabama at Birmingham	...	18	...
University of Alabama in Huntsville	...	16	...
Alabama State University	...	16	...
The University of Alabama	...	21	...
...			

(1358 rows)

How we populated the database

Of the datasets we reported having collected in the first deliverable, we retained the following:

- The “College scorecard data”² (`college_scorecard`);
- *The Huffington post* and *Chronicle of higher education*’s data on how colleges finance their athletics³(`college_athletics_financing`); and
- The *Department of education*’s data on foreign gifts to and contracts with US colleges⁴ (`foreign_gifts`).

²<https://collegescorecard.ed.gov/data>

³Described at <http://projects.huffingtonpost.com/ncaa/reporters-note> and directly downloadable from <http://hpin.s3.amazonaws.com/ncaa-financials/ncaa-financials-data.zip>.

We rejected each of the other databases that we initially reported having collected owing either to its redundancy or to its mismatch with the date-ranges or reporting protocols of our other databases. For instance, the dataset available from *Equity in athletics data analysis* (EADA)⁵ reports data aggregated at the end of each academic year rather than at the end of the year proper.

We found that extensive pre-processing was required for each of our datasets despite limiting our study to the year 2014, which is the only year for which our chosen datasets overlap. Broadly speaking, we prepared each dataset by converting it to CSV (if necessary), then producing a smaller CSV containing only selected columns. To convert datasets that were only available as XLS or XLSX files as of March 2025 to CSVs, we used the tool `in2csv`, which is part of CSVKit.

Additionally, we removed two rows corresponding to colleges that do not appear in `college_scorecard` from `foreign_gifts`:

```
27708,00672500,University of Tennessee Health Science  
Center,Memphis,TN,2014-03-01,156000,Contract,IRELAND,Neotype Biosciences Limited  
27709,00672500,University of Tennessee Health Science  
Center,Memphis,TN,2014-04-01,525000,Contract,CHINA,First Hospital of Qiqihaer
```

For a brief summary of each dataset, along with some of the steps taken to retrieve it, see below. Note that in the following three sections, all commands were performed relative to the `datasets/` directory of our project.

college_scorecard

- Date range: 1996–2024

The College scorecard data, while off by an average of 10% in reported graduation rates among Pell-grant recipients, give a comprehensive view of universities in the US as a whole. - **link:** https://ed-public-download.scorecard.network/downloads/College_Scorecard_Raw_Data_01162025.zip

```
mkdir college_scorecard  
cd college_scorecard  
wget https://ed-public-download.scorecard.network/downloads/Most-Recent-Cohorts-  
Institution_01162025.zip  
unzip Most-Recent-Cohorts-Institution_01162025.zip  
rm Most-Recent-Cohorts-Institution_01162025.zip  
wget https://collegescorecard.ed.gov/files/CollegeScorecardDataDictionary.xlsx  
wget https://collegescorecard.ed.gov/files/InstitutionDataDocumentation.pdf  
wget https://collegescorecard.ed.gov/files/EarningsDataErrata.pdf
```

college_athletics_financing

- Date range: 2010–2014.

The Huffington post and *Chronicle of higher education* teamed up to investigate have collected data on how college's finance their athletics - **link:** <http://hpins3.amazonaws.com/ncaa-financials/>

⁴Described at <https://studentaid.ed.gov/sa/about/data-center/school/foreign-gifts> and downloadable from <https://studentaid.gov/sites/default/files/ForeignGifts.xls>.

⁵Downloadable for selected years from <https://ope.ed.gov/athletics/#/datafile/list>.

ncaa-financials-data.zip - See their report and - *The Washington post*'s report on the unprofitability of college athletics

```
cd "$DATASET_DIR"
mkdir college_athletics_financing
cd college_athletics_financing
wget http://hpin.s3.amazonaws.com/ncaa-financials/ncaa-financials-data.zip
unzip ncaa-financials-data.zip
rm ncaa-financials-data.zip
rm -rf __MACOSX/
cd ncaa-financials-data
mv * ..
cd ..
rm -rf ncaa-financials-data
in2csv CHE_RealScoredatadictionary.xlsx > data_dictionary.csv
rm CHE_RealScoredatadictionary.xlsx
```

foreign_gifts

- Date range: 2014–2020.

The *Department of education's* data on foreign gifts to and contracts with US colleges - **link:** <https://studentaid.gov/sites/default/files/ForeignGifts.xls> - from: <https://catalog.data.gov/dataset/foreign-gifts-and-contracts-report-e353d> - See their database on such gifts and contracts.

```
mkdir foreign_gifts
cd foreign_gifts
wget --user-agent="" https://studentaid.gov/sites/default/files/ForeignGifts.xls
# `in2csv` is part of CSVKit (https://github.com/wireservice/csvkit), which might
be in `brew`
in2csv ForeignGifts.xls > foreign_gifts.csv
rm ForeignGifts.xls
```

Questions, their formulations in english and SQL, the database's answers, along with any needful rationalization

We updated almost all of our questions, and came up with many new ones, to both better fit the limitations of our dataset and to reframe questions that could not be answered without additional statistical analysis I've said it before and I'll say it again: this is a “Man searches for keys under streetlamp” situation.

Q1: Which schools have the highest undergraduate student enrollment?

```
SELECT i.name, i.state, i.city, i.undergraduate_enrollment
FROM colleges_2014.institutions AS i
WHERE i.undergraduate_enrollment IS NOT null
ORDER BY i.undergraduate_enrollment DESC;
```

	A-Z name	A-Z state	A-Z city	123 undergraduate_enrollment
1	University of Phoenix-Arizona	AZ	Phoenix	151,558
2	Ivy Tech Community College	IN	Indianapolis	77,657
3	Miami Dade College	FL	Miami	61,470
4	Lone Star College System	TX	The Woodlands	59,920
5	Houston Community College	TX	Houston	58,084
6	University of Central Florida	FL	Orlando	52,280
7	Liberty University	VA	Lynchburg	49,340
8	Texas A & M University-College Station	TX	College Station	46,941
9	American Public University System	WV	Charles Town	44,924
10	Ashford University	CA	San Diego	44,744
11	Western Governors University	UT	Salt Lake City	44,499
12	Northern Virginia Community College	VA	Annandale	43,869
13	Ohio State University-Main Campus	OH	Columbus	43,733
14	Tarrant County College District	TX	Fort Worth	42,189
15	Purdue University Global-Davenport	IA	Davenport	40,335

Refresh Save Cancel Export data 200 200+

Q2: Which schools have the highest graduate student enrollment?

```

SELECT i.name, i.state, i.city, i.grad_enrollment
FROM colleges_2014.institutions AS i
WHERE i.grad_enrollment IS NOT null
ORDER BY i.grad_enrollment DESC;
    
```

	A-Z name	A-Z state	A-Z city	123 grad_enrollment
1	Walden University	MN	Minneapolis	43,228
2	University of Phoenix-Arizona	AZ	Phoenix	39,187
3	Liberty University	VA	Lynchburg	31,715
4	Capella University	MN	Minneapolis	26,311
5	New York University	NY	New York	24,289
6	University of Southern California	CA	Los Angeles	23,714
7	Grand Canyon University	AZ	Phoenix	22,904
8	Columbia University in the City of New York	NY	New York	19,489
9	Nova Southeastern University	FL	Fort Lauderdale	19,449
10	Harvard University	MA	Cambridge	18,453
11	University of Minnesota-Twin Cities	MN	Minneapolis	16,796
12	University of Florida	FL	Gainesville	16,630
13	University of Michigan-Ann Arbor	MI	Ann Arbor	15,230
14	Johns Hopkins University	MD	Baltimore	15,015
15	George Washington University	DC	Washington	14,873

Refresh Save Cancel Export data 200 200+

Q3: Which schools report charging the highest in-state tuition?

```

SELECT i.name, i.state, i.city, ifp.in_state_cost
FROM colleges_2014.institutional_financial_profile AS ifp
JOIN colleges_2014.institutions AS i ON ifp.unitid = i.unitid
WHERE ifp.in_state_cost IS NOT NULL
ORDER BY ifp.in_state_cost DESC
LIMIT 10;
    
```

institutions(+ 1 X)

```
^`SELECT i.name, i.state, i.city, ifp.in_state_cost | Enter a SQL expression to filter results (use Ctrl+Space)
```

	A-Z name	A-Z state	A-Z city	123 in_state_cost
1	Aviator College of Aeronautical Science and Technology	FL	Fort Pierce	74,787
2	Columbia University in the City of New York	NY	New York	51,008
3	Sarah Lawrence College	NY	Bronxville	50,780
4	Landmark College	VT	Putney	50,080
5	Vassar College	NY	Poughkeepsie	49,570
6	University of Chicago	IL	Chicago	49,380
7	Trinity College	CT	Hartford	49,056
8	Carnegie Mellon University	PA	Pittsburgh	49,022
9	George Washington University	DC	Washington	48,760
10	Oberlin College	OH	Oberlin	48,682

Q4: Which schools report lowest ratios between in-state and out-of-state tuition?

```
SELECT i.name, i.state, i.city, cast((cast(ifp.in_state_cost as float)/
ifp.out_state_cost) AS numeric(7,6)) AS in_to_out
FROM colleges_2014.institutional_financial_profile AS ifp
JOIN colleges_2014.institutions AS i ON ifp.unitid = i.unitid
WHERE ifp.in_state_cost IS NOT NULL
ORDER BY in_to_out ASC;
```

institutions 1 X

```
^`SELECT i.name, i.state, i.city, cast((cast(i | Enter a SQL expression to filter results (use Ctrl+Space)
```

	A-Z name	A-Z state	A-Z city	123 in_to_out
1	Santa Monica College	CA	Santa Monica	0.145482
2	Cosumnes River College	CA	Sacramento	0.151815
3	Folsom Lake College	CA	Folsom	0.151815
4	American River College	CA	Sacramento	0.151815
5	Sacramento City College	CA	Sacramento	0.151815
6	Lemoore College	CA	Lemoore	0.153333
7	Coalinga College	CA	Coalinga	0.162544
8	Las Positas College	CA	Livermore	0.163271
9	Chabot College	CA	Hayward	0.163271
10	San Joaquin General Hospital School of Radiation Technology	CA	French Camp	0.171642
11	San Joaquin Delta College	CA	Stockton	0.171642
12	College of the Redwoods	CA	Eureka	0.172656
13	Fresno City College	CA	Fresno	0.173989
14	Palo Verde College	CA	Blythe	0.174905
15	Reedley College	CA	Reedley	0.175197

Refresh Save Cancel Export data 200 200+ :

Q5: How much education have people endured in the areas where the students at institutions with the lowest in-state to out-of-state tuition ratios come from?

The present dataset doesn't allow for answering this question because apparently pct_ba and pct_grad_prof weren't being reported or gathered in 2014.

```
SELECT i.name, i.state, i.city,
       cast((cast(ifp.in_state_cost AS float)/ifp.out_state_cost)
             AS numeric(7,6)) AS in_to_out,
       sb.pct_ba, sb.pct_grad_prof
  FROM colleges_2014.institutional_financial_profile AS ifp
 JOIN colleges_2014.institutions AS i ON ifp.unitid = i.unitid
 JOIN colleges_2014.student_backgrounds AS sb ON ifp.unitid = sb.unitid
 WHERE ifp.in_state_cost IS NOT NULL
 ORDER BY in_to_out ASC;
```

Q6: What are SAT scores like in the reported schools with the lowest ratios of in-state to out-of-state tuition?

```
SELECT i.name, i.state, i.city,
       cast((cast(ifp.in_state_cost AS float)/ifp.out_state_cost)
            AS numeric(7,6)) AS in_to_out,
       sap.sat_avg_all
  FROM colleges_2014.institutional_financial_profile AS ifp
 JOIN colleges_2014.institutions AS i ON ifp.unitid = i.unitid
 JOIN colleges_2014.student_academic_profile AS sap ON ifp.unitid = sap.unitid
 WHERE ifp.in_state_cost IS NOT NULL AND sap.sat_avg_all IS NOT NULL
 ORDER BY in_to_out ASC;
```

	A-Z name	A-Z state	A-Z city	123 in_to_out	123 sat_avg_all
1	University of Florida	FL	Gainesville	0.220804	1,273
2	New College of Florida	FL	Sarasota	0.230964	1,274
3	University of Florida-Online	FL	Gainesville	0.233776	1,273
4	Florida Gulf Coast University	FL	Fort Myers	0.243144	1,059
5	University of North Carolina at Chapel Hill	NC	Chapel Hill	0.249446	1,328
6	Cleveland State Community College	TN	Cleveland	0.256202	910
7	Roane State Community College	TN	Harriman	0.2572	910
8	The University of Montana	MT	Missoula	0.272618	1,075
9	Elizabeth City State University	NC	Elizabeth City	0.278118	866
10	Florida Atlantic University	FL	Boca Raton	0.279636	1,058
11	The University of Texas at Austin	TX	Austin	0.282179	1,296
12	University of Central Florida	FL	Orlando	0.283438	1,185
13	Fayetteville State University	NC	Fayetteville	0.286233	892
14	Southeast New Mexico College	NM	Carlsbad	0.286486	984
15	Eastern New Mexico University Ruidoso Br.	NM	Ruidoso	0.287458	935

Q7: Which schools accepted the most money from foreign donors in 2014?

```
SELECT i.name, i.state, sum(fg.gift_amount) AS gift_sum
FROM colleges_2014.foreign_gifts AS fg
JOIN colleges_2014.institutions AS i ON fg.unitid = i.unitid
GROUP BY i.unitid
ORDER BY gift_sum DESC
LIMIT 10;
```

institutions 1 X

SELECT i.name, i.state, sum(fg.gift_amount) | Enter a SQL expression to filter result:

	A-Z name	A-Z state	123 gift_sum
1	Cornell University	NY	196,549,984
2	University of Phoenix-Arizona	AZ	153,244,364
3	Harvard University	MA	146,673,012
4	Massachusetts Institute of Technology	MA	100,419,584
5	Duke University	NC	78,248,023
6	Brigham Young University	UT	76,691,145
7	Georgetown University	DC	71,742,656
8	Yale University	CT	59,980,197
9	University of Colorado Boulder	CO	59,362,219
10	Northwestern University	IL	57,063,397

Q8: What is instructional spending like at those schools?

```
SELECT i.name, i.state, sum(fg.gift_amount) AS gift_sum,
ifp.instruction_spend_per_student
FROM colleges_2014.foreign_gifts AS fg
JOIN colleges_2014.institutions AS i ON fg.unitid = i.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON fg.unitid =
ifp.unitid
GROUP BY i.unitid, ifp.instruction_spend_per_student
ORDER BY gift_sum DESC
LIMIT 10;
```

institutions(+) 1 X

SELECT i.name, i.state, sum(fg.gift_amount) | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	123 gift_sum	123 instruction_spend_per_student
1	Cornell University	NY	196,549,984	23,818
2	University of Phoenix-Arizona	AZ	153,244,364	2,016
3	Harvard University	MA	146,673,012	49,500
4	Massachusetts Institute of Technology	MA	100,419,584	62,770
5	Duke University	NC	78,248,023	50,756
6	Brigham Young University	UT	76,691,145	15,124
7	Georgetown University	DC	71,742,656	31,102
8	Yale University	CT	59,980,197	107,982
9	University of Colorado Boulder	CO	59,362,219	14,987
10	Northwestern University	IL	57,063,397	37,339

Q9: How profitable are sports at schools that reported foreign gifts?

```
SELECT i.name, i.state, sum(fg.gift_amount) AS gift_sum,
cast(ifp.instruction_spend_per_student AS numeric(9,2)), af.net_revenue AS
net_revenue
```

```

FROM colleges_2014.foreign_gifts AS fg
JOIN colleges_2014.institutions AS i ON fg.unitid = i.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON fg.unitid =
ifp.unitid
JOIN colleges_2014.athletics_financing AS af ON fg.unitid = af.unitid
GROUP BY i.unitid, ifp.instruction_spend_per_student,
af.athletic_revenues, af.athletic_expenses, af.net_revenue
ORDER BY gift_sum DESC;

```

institutions(+ 1) ×

SELECT i.name, i.state, sum(fg.gift_amou | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	123 gift_sum	123 instruction_spend_per_student	123 net_revenue
1	University of Colorado Boulder	CO	59,362,219	14,987	-76,342
2	University of California-Berkeley	CA	42,302,349	18,988	13,815,871
3	University of Michigan-Ann Arbor	MI	33,596,535	22,728	13,038,628
4	University of California-Los Angeles	CA	28,282,135	40,020	0
5	Purdue University-Main Campus	IN	18,065,065	16,568	-4,949,278
6	University of Illinois Urbana-Champaign	IL	17,189,768	13,924	-2,925,082
7	University of Washington-Seattle Campus	WA	16,199,663	24,561	14,178,050
8	Ball State University	IN	12,713,845	10,219	-1,821,091
9	University of Arizona	AZ	10,962,575	12,071	4,386,774
10	George Mason University	VA	10,930,688	12,466	-618,671

Refresh Save Cancel Export data 200 53

Q10: How profitable are sports at schools that gave a report as to whether or not their sports-related doings are profitable?

```

SELECT i.name, i.state, cast(ifp.instruction_spend_per_student AS numeric(9,2)),
af.net_revenue AS net_revenue
FROM colleges_2014.institutions AS i
JOIN colleges_2014.institutional_financial_profile AS ifp ON i.unitid =
ifp.unitid
JOIN colleges_2014.athletics_financing AS af ON i.unitid = af.unitid
GROUP BY i.unitid, ifp.instruction_spend_per_student,
af.athletic_revenues, af.athletic_expenses, af.net_revenue
ORDER BY ifp.instruction_spend_per_student DESC;

```

institutions(+ 1) ×

SELECT i.name, i.state, cast(ifp.instructric | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	123 instruction_spend_per_student	123 net_revenue
1	University of California-Los Angeles	CA	40,020	0
2	University of Illinois Chicago	IL	26,053	316,023
3	University of North Carolina at Chapel Hill	NC	25,710	308,692
4	University of Washington-Seattle Campus	WA	24,561	14,178,050
5	University of California-Davis	CA	22,820	1,531,020
6	University of Michigan-Ann Arbor	MI	22,728	13,038,628
7	University of Connecticut	CT	22,554	123,178
8	Stony Brook University	NY	20,564	570,236
9	University of Hawaii at Manoa	HI	20,060	-2,096,630
10	University of California-Berkeley	CA	18,988	13,815,871

Refresh Save Cancel Export data 200 200+

Q11: How is the profitability of sports distributed among schools?

```
SELECT cast(avg(af.net_revenue) AS numeric(10,2)) AS mean,
       cast(percentile_cont(0.5) WITHIN GROUP
            (ORDER BY af.net_revenue) AS numeric(10,2)) AS median,
       cast(MODE() WITHIN GROUP (ORDER BY af.net_revenue) AS numeric(10,2)) AS mode,
       cast(stddev(af.net_revenue) AS numeric(10,2)) AS standard_deviation
  FROM colleges_2014.athletics_financing AS af;
```

	123 mean	123 median	123 mode	123 standard_deviation
1	1,250,589.87	69,292	0	7,278,432.25

Q12: Which country donated most frequently to each school that reported foreign gifts?

```
SELECT i.name, fg.unitid,
       MODE() WITHIN GROUP (ORDER BY fg.donor_country) AS top_donor
  FROM colleges_2014.foreign_gifts AS fg
 JOIN colleges_2014.institutions AS i ON fg.unitid = i.unitid
 GROUP BY i.name, fg.unitid;
```

	A-Z name	123 unitid	A-Z top_donor
1	American University	131,159	ENGLAND
2	Arizona State University Campus Immersion	104,151	UNITED ARAB EMIRATES
3	Auburn University at Montgomery	100,830	CHINA
4	Babson College	164,580	INDONESIA
5	Ball State University	150,136	BRAZIL
6	Baylor University	223,232	ISRAEL
7	Berkeley College-New York	189,228	FRANCE
8	Boise State University	142,115	KUWAIT
9	Boston College	164,924	IRELAND
10	Boston University	164,988	UNITED ARAB EMIRATES

Q13: And again, but with a CTE:

```
WITH top_donor AS (
    SELECT fg.unitid,
           MODE() WITHIN GROUP (ORDER BY fg.donor_country) AS top_donor
      FROM colleges_2014.foreign_gifts AS fg
     GROUP BY fg.unitid
)
SELECT i.name, td.top_donor
  FROM colleges_2014.foreign_gifts AS fg
 JOIN colleges_2014.institutions AS i ON fg.unitid = i.unitid
```

```
JOIN top_donor AS td ON fg.unitid = td.unitid  
GROUP BY i.name, td.top_donor;
```

WITH top_donor AS (SELECT fg.unitid, M Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z top_donor
1	Virginia Commonwealth University	CHINA
2	Xavier University of Louisiana	CHINA
3	Bryant University	CHINA
4	Babson College	INDONESIA
5	University of Illinois Chicago	ENGLAND
6	Keck Graduate Institute	INDIA
7	Houston Community College	QATAR
8	Wesleyan College	CHINA
9	Purdue University-Main Campus	ENGLAND
10	Yeshiva University	CANADA

Q14: And again in still more convoluted fashion, but this time listing the top three donor countries for each university.

```
WITH donor_ranks AS (
    SELECT fg.unitid, fg.donor_country, count(*) AS n_gifts,
        ROW_NUMBER() OVER (PARTITION BY fg.unitid ORDER BY count(*) DESC,
            fg.donor_country) AS rank,
        sum(fg.gift_amount) AS total
    FROM colleges_2014.foreign_gifts as fg
    GROUP BY unitid, donor_country
)
SELECT i.name, dr.donor_country AS top_donor, dr.total, rank
FROM donor_ranks AS dr
JOIN colleges_2014.institutions AS i on dr.unitid = i.unitid
WHERE rank = 1 OR rank = 2 OR rank = 3
ORDER BY i.name ASC, dr.total DESC;
```

institutions(+)

WITH donor_ranks AS (SELECT fg.unitid, Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z top_donor	123 total	123 rank
1	American University	ENGLAND	1,000,000	1
2	Arizona State University Campus Immersion	CHINA	4,554,226	2
3	Arizona State University Campus Immersion	QATAR	359,781	3
4	Arizona State University Campus Immersion	UNITED ARAB EMIRATES	276,398	1
5	Auburn University at Montgomery	CHINA	283,964	1
6	Babson College	INDONESIA	3,187,494	1
7	Babson College	FRANCE	2,179,197	2
8	Babson College	SCOTLAND	748,064	3
9	Ball State University	CHINA	7,184,164	2
10	Ball State University	SAUDI ARABIA	5,265,640	3

Q15: Which countries donated the most money, and how much did each one donate?

```
SELECT fg.donor_country, sum(gift_amount) AS donated
FROM colleges_2014.foreign_gifts AS fg
GROUP BY fg.donor_country
ORDER BY donated DESC
LIMIT 10;
```

foreign_gifts 1 X

	A-Z donor_country	123 donated
1	QATAR	323,711,898
2	INDIA	219,063,910
3	SAUDI ARABIA	168,725,991
4	ENGLAND	148,236,489
5	CANADA	106,585,672
6	CHINA	89,950,886
7	UNITED ARAB EMIRATES	76,368,683
8	HONG KONG	70,250,667
9	JAPAN	67,744,170
10	SWITZERLAND	65,511,449

Q16: Which country donated most often?

```
SELECT MODE() WITHIN GROUP (ORDER BY fg.donor_country) AS donor
FROM colleges_2014.foreign_gifts AS fg;
```

Results 1 X	
SELECT MODE() WITHIN G	
	A-Z donor ▾
1	ENGLAND

Q17: Which of the schools in Oregon that report average SAT scores, in-state tuition, and out-of-state tuition have the lowest student-to-faculty ratios?

```
SELECT i.name, i.state, i.city, i.student_faculty_ratio
FROM colleges_2014.institutions AS i
JOIN colleges_2014.student_backgrounds AS sb ON i.unitid = sb.unitid
JOIN colleges_2014.student_academic_profile AS sap ON sb.unitid = sap.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON sap.unitid =
ifp.unitid
WHERE sap.sat_avg_all IS NOT NULL
    AND i.student_faculty_ratio IS NOT NULL
    AND ifp.in_state_cost IS NOT NULL
    AND ifp.out_state_cost IS NOT NULL
    AND i.state = 'OR'
ORDER BY i.student_faculty_ratio;
```

institutions 1 X				
	A-Z name ▾	A-Z state	A-Z city	123 student_faculty_ratio ▾
1	Reed College	OR	Portland	9
2	Pacific University	OR	Forest Grove	10
3	Willamette University	OR	Salem	11
4	Linfield University	OR	McMinnville	12
5	University of Portland	OR	Portland	14
6	George Fox University	OR	Newberg	14
7	Multnomah University	OR	Portland	14
8	Corban University	OR	Salem	14
9	Bushnell University	OR	Eugene	15
10	Concordia University-Portland	OR	Portland	17

Q18: How much does each of those schools spend directly on instructing students?

```
SELECT i.name, i.state, i.city, i.student_faculty_ratio,
ifp.instruction_spend_per_student
FROM colleges_2014.institutions AS i
```

```

JOIN colleges_2014.student_backgrounds AS sb ON i.unitid = sb.unitid
JOIN colleges_2014.student_academic_profile AS sap ON sb.unitid = sap.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON sap.unitid =
ifp.unitid
WHERE sap.sat_avg_all IS NOT NULL
    AND i.student_faculty_ratio IS NOT NULL
    AND ifp.in_state_cost IS NOT NULL
    AND ifp.out_state_cost IS NOT NULL
    AND i.state = 'OR'
ORDER BY i.student_faculty_ratio;

```

institutions(+ 1) X

Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	A-Z city	123 student_faculty_ratio	123 instruction_spend_per_student
1	Reed College	OR	Portland	9	22,586
2	Pacific University	OR	Forest Grove	10	12,254
3	Willamette University	OR	Salem	11	13,307
4	Linfield University	OR	McMinnville	12	13,440
5	University of Portland	OR	Portland	14	10,653
6	George Fox University	OR	Newberg	14	8,930
7	Multnomah University	OR	Portland	14	5,142
8	Corban University	OR	Salem	14	5,702
9	Bushnell University	OR	Eugene	15	4,694
10	Concordia University-Portland	OR	Portland	17	2,545

Refresh Save Cancel Export data 200 17

Q19: Of those, which are included in the athletics financing database and what are their net revenues from athletics, broadly construed?

```

SELECT i.name, i.state, i.city, i.student_faculty_ratio,
       af.athletic_revenues, af.athletic_expenses,
       (af.athletic_revenues - af.athletic_expenses) AS net
FROM colleges_2014.institutions AS i
JOIN colleges_2014.student_backgrounds AS sb ON i.unitid = sb.unitid
JOIN colleges_2014.student_academic_profile AS sap ON sb.unitid = sap.unitid
JOIN colleges_2014.institutional_financial_profile AS ifp ON sap.unitid =
ifp.unitid
JOIN colleges_2014.athletics_financing AS af ON i.unitid = af.unitid
WHERE sap.sat_avg_all IS NOT NULL
    AND i.student_faculty_ratio IS NOT NULL
    AND ifp.in_state_cost IS NOT NULL
    AND ifp.out_state_cost IS NOT NULL
    AND i.state = 'OR'
ORDER BY i.student_faculty_ratio;

```

institutions(+ 1) X

Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	A-Z city	123 student_faculty_ratio	123 athletic_revenues	123 athletic_expenses	123 net
1	Oregon State University	OR	Corvallis	19	63,301,794	73,020,003	-9,718,209
2	University of Oregon	OR	Eugene	19	196,030,398	110,378,432	85,651,966
3	Portland State University	OR	Portland	19	13,402,378	14,401,920	-999,542

Q20: Which schools' graduates have the highest median debt?

```
SELECT i.name, i.state, i.city, sfp.grad_debt_mdn
FROM colleges_2014.student_financial_profile AS sfp
JOIN colleges_2014.institutions AS i ON sfp.unitid = i.unitid
WHERE sfp.grad_debt_mdn IS NOT NULL
ORDER BY sfp.grad_debt_mdn DESC
LIMIT 10;
```

institutions(+ 1 ×)

Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	A-Z city	123 grad_debt_mdn
1	Southwest University of Visual Arts-Albuquerque	NM	Albuquerque	49,586
2	Southwest University of Visual Arts-Tucson	AZ	Tucson	49,586
3	International Academy of Design and Technology-Troy	MI	Troy	47,338
4	International Academy of Design and Technology-Nashville	TN	Nashville	47,338
5	Collins College	AZ	Phoenix	47,338
6	Sanford-Brown College-Chicago	IL	Chicago	47,338
7	Boston Architectural College	MA	Boston	46,560
8	Benedict College	SC	Columbia	44,000
9	Florida Memorial University	FL	Miami Garden	44,000
10	Charlotte Christian College and Theological Seminary	NC	Charlotte	43,999

Q21: Do the schools with the largest sports subsidies have fewer students from low income or first-to-attend-college backgrounds?

(There doesn't seem to be any correlation.)

```
SELECT i.name, i.state, sfp.pell_ever, sfp.first_gen, af.subsidy
FROM colleges_2014.student_financial_profile AS sfp
JOIN colleges_2014.institutions AS i ON sfp.unitid = i.unitid
JOIN colleges_2014.athletics_financing AS af ON af.unitid = i.unitid;
```

institutions(+ 1 ×)

Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z name	A-Z state	123 pell_ever	123 first_gen	123 subsidy
1	University of Alabama at Birmingham	AL	0.6301091178	0.3429817605	20,345,607
2	Alabama State University	AL	0.8892147279	0.375	10,750,355
3	The University of Alabama	AL	0.494269341	0.2342332729	5,997,100
4	Auburn University	AL	0.4621743037	0.1831610044	4,384,800
5	University of South Alabama	AL	0.663485776	0.3425349922	17,883,165
6	Troy University	AL	0.7531834191	0.4131498471	17,834,972
7	Arizona State University Campus Immersion	AZ	0.6384225131	0.3625954198	10,073,205
8	University of Arizona	AZ	0.640524918	0.3052161456	7,901,134
9	Northern Arizona University	AZ	0.6404511392	0.3717641221	11,956,387
10	University of Arkansas at Little Rock	AR	0.7594755662	0.4139684239	6,195,669

Q22: Do schools that spend more on student instruction have higher faculty salaries?

(They have more money, so yes.)

```

SELECT i.name, i.state, ifp.average_faculty_salary,
ifp.instruction_spend_per_student
FROM colleges_2014.institutional_financial_profile AS ifp
JOIN colleges_2014.institutions AS i ON ifp.unitid = i.unitid;

```

	A-Z name	A-Z state	123 average_faculty_salary	123 instruction_spend_per_student
1	Alabama A & M University	AL	6,892	7,437
2	University of Alabama at Birmingham	AL	9,957	17,920
3	Amridge University	AL	3,430	5,532
4	University of Alabama in Huntsville	AL	9,302	10,211
5	Alabama State University	AL	6,609	7,618
6	The University of Alabama	AL	9,667	10,239
7	Central Alabama Community College	AL	5,815	6,847
8	Athens State University	AL	7,711	6,446
9	Auburn University at Montgomery	AL	7,255	6,837
10	Auburn University	AL	9,487	11,704

Refresh Save Cancel Export data 200 200+

Q23: Which of the colleges that responded pay the most per student sports in the undergrad program?

```

SELECT i.name, (af.athletic_expenses - af.student_fees) /
i.undergraduate_enrollment AS sports_pay_per_student
FROM colleges_2014.institutions i
JOIN colleges_2014.athletics_financing af ON i.unitid = af.unitid
WHERE af.athletic_expenses IS NOT NULL
AND i.undergraduate_enrollment > 0
ORDER by sports_pay_per_student DESC
LIMIT 10;

```

	A-Z name	123 sports_spending_per_student
1	Auburn University	5,993.7398849566
2	University of Louisville	5,733.0847187126
3	University of Oklahoma-Norman Campus	5,674.6896484565
4	University of Oregon	5,365.5605866087
5	Louisiana State University and Agricultural & Mechanical College	5,219.6266972027
6	Oklahoma State University-Main Campus	5,163.0315952704
7	University of Michigan-Ann Arbor	5,133.8268419747
8	University of Virginia-Main Campus	4,781.8427972929
9	University of Nebraska-Lincoln	4,735.6518844787
10	University of Kansas	4,732.2864588874

Refresh Save Cancel Export data 200 10

Q24: Which of the colleges that responded pay the most per student sports in the grad program?

```
SELECT i.name,(af.athletic_expenses - af.student_fees) / i.grad_enrollment AS  
sports_pay_per_student  
FROM colleges_2014.institutions i  
JOIN colleges_2014.athletics_financing af ON i.unitid = af.unitid  
WHERE af.athletic_expenses IS NOT NULL  
    AND i.grad_enrollment > 0  
ORDER by sports_pay_per_student DESC  
LIMIT 10;
```

institutions 1 X

SELECT i.name,(af.athletic_expenses - af.sports_pay_per_student) AS sports_pay_per_student FROM institutions i JOIN athletic_funding af ON i.id = af.institution_id ORDER BY sports_pay_per_student DESC

	A-Z name	sports_pay_per_student
1	University of North Carolina Asheville	95,690.1219512195
2	University of Arkansas at Pine Bluff	61,281.8035714286
3	Utah Valley University	36,258.8343195266
4	University of Oregon	30,721.8922815946
5	University of Wisconsin-Green Bay	29,839.8735177866
6	The University of Alabama	24,419.3507082153
7	Savannah State University	23,908.4178082192
8	Louisiana State University and Agricultural & Mechanical College	23,324.2529239766
9	Auburn University	23,273.8179064925
10	University of Arkansas	21,528.1579186549

Q25: How many students are involved in both academics and sports?

```
SELECT i.name as college_name, SUM(i.undergraduate_enrollment) AS  
no_of_students_in_sports  
FROM colleges_2014.institutions i  
WHERE i.unitid IN (SELECT DISTINCT unitid FROM colleges_2014.athletics_financing)  
GROUP BY i.name  
ORDER BY no of students in sports DESC;
```

institutions 1 ×

SELECT i.name as College_name, SUM(i.no_of_students_in_sports) Enter a SQL expression to filter results (use Ctrl+Space)

	AZ college_name	123 no_of_students_in_sports
1	Texas A & M University-College Station	46,941
2	Ohio State University-Main Campus	43,733
3	Arizona State University Campus Immersion	39,316
4	Florida International University	39,102
5	The University of Texas at Austin	38,914
6	Michigan State University	38,395
7	Rutgers University-New Brunswick	34,094
8	University of Arizona	32,646
9	Florida State University	32,432
10	Indiana University-Bloomington	32,252

Refresh Save Cancel Export data 200 200+

Q26: Which schools and colleges that also report students' sexes report the lowest student-faculty ratios?

This question relies on the faculty_and_sex_ratios view.

```
SELECT fsr.name, fsr.state, fsr.city, fsr.student_faculty_ratio
FROM faculty_and_sex_ratios AS fsr
WHERE fsr.student_faculty_ratio IS NOT NULL
ORDER BY fsr.student_faculty_ratio ASC
LIMIT 15;
```

90	name	state	city	student_faculty_ratio
91	California Institute of Technology	CA	Pasadena	3
92	Conception Seminary College	MO	Conception	4
93	Graham Hospital School of Nursing	IL	Canton	4
94	Mercy School of Nursing	NC	Charlotte	4
95	Cleveland University-Kansas City	KS	Overland Park	4
96	Montana Bible College	MT	Billings	5
97	Pontifical College Josephinum	OH	Columbus	5
98	Jewish Theological Seminary of America	NY	New York	6
99	Maine College of Health Professions	ME	Lewiston	6
100	Cabarrus College of Health Sciences	NC	Concord	6
101	Summit Christian College	NE	Gering	6
102	Yale University	CT	New Haven	6
103	Gallaudet University	DC	Washington	6
104	Columbia University in the City of New York	NY	New York	6
105	University of Chicago	IL	Chicago	6
106	(15 rows)			
107				
108				
109	analysis=#			

Unused questions from our original list

Some of these questions affected the queries we formulated. See the brief note below each question.

- How many students are in high school, under grad, grad etc programs?
 - ▶ Changed to consider undergraduate and graduate programs separately. See Q1 and Q2.

- Which colleges have the highest fees?
 - Changed to consider in-state and out-of-state tuition separately. See Q3 and Q4. Additionally, used as part of the answer to questions Q4 and Q6.
- What is the connection between college sports and academics?
 - This question was too vague to answer with a database.
- Does spending on college sports affect student's academic performances?
 - We didn't formulate this question, but could have asked something similar—something like, "Are SAT scores correlated with spending on sports?"
- How is cost of attendance affected by funding for college sports?
 - We didn't formulate this question either, but, again, we could've.
- How does increased funding for college sports affect universities, colleges, and the areas surrounding them?
 - This question was too vague, and would've required importing tax revenue data; without a more focused question, it wasn't worth pursuing.
- Does sports gambling correlate with subsidies to college sports?
 - As with the previous question, answering this would've required including tax revenue data.
- Is there a connection between subsidies to college sports teams and Title-IX investigations?
 - Answering this question would've required including the EADA data, which we collected, but did not import since our database has already outgrown the scope of this assignment.
- How many students are involved in both academics and sports?
 - One would hope that everyone who is a student is involved in academics.
- What are the top 15 schools and colleges that have good ratings?
 - Answering this question as such would've required collecting additional data, but we asked a similar question in our queries about student-faculty ratios. See Q17, Q18, Q19, and Q26.
- Which schools and colleges support financing for academically oriented students?
 - Finding out the extent to which different schools provide financial support to students would've required collecting additional data.
- Which schools and colleges support financing for students involved in sports?
 - As with the previous question, answering this question would've required collection of additional data.
- How many students are involved in college sports?
 - There has been talk of Q25 in this connexion, but I have my doubts.
- What kinds of funding are offered to students at schools and colleges?
- How much funding is offered to students when comparing between states?
- Which schools and colleges are highly supportive of sports?
 - Adapted for Q21.
- What is the variation in funding for education versus sports?
 - I suppose we could've asked this by selecting instructional spending per student and institutional spending on sports, then getting the variance of both.
- Which schools and colleges participate and encourage students in more than 1 sport?
 - Answering this question would've required importing the EADA data.
- What is the average of students who are good at both sports and academics?

- ▶ Maybe we could've answered a question somewhat, if you really squinted, like this by gathering data on the number of sports and academic scholarships distributed to distinct students per institution.
- How many consecutive wins have various college sports team had?
 - ▶ It may be that the EADA data includes game result data, in which case its inclusion would've helped to answer this question.
- How many students, by school, have received funding based on athletics participation?
 - ▶ This is another EADA question.
- What is the average amount or scholarship money offered per year in each category?
 - ▶ Additional information on scholarships might've enabled answering this question.
- Is there a difference in the average funding for male and female college sports teams?
 - ▶ The EADA data includes information on this subject.
- How does any difference in the previous question compare to differences in funding based on academic merit?
 - ▶ To answer this question, we would've had to've collected more information on scholarships.