

Investigating the Data

1. What grades are stored in the database?
 - a. SQL: SELECT Name from Grade;
 - b. 1st Grade - 5th Grade;
2. What emotions may be associated with a poem?
 - a. SQL: SELECT Name from Emotion;
 - b. Anger, Fear, Sadness, Joy
3. How many poems are in the database?
 - a. SQL: SELECT count(Title) from Poem;
 - b. 32,842 poems.
4. Sort authors alphabetically by name. What are the names of the top 76 authors?
 - a. SQL: SELECT TOP 76 Name from Author ORDER BY Name ASC;
 - b. .lilly

.morgan

.tyler.t and julian.c.

a

a

a

a

a friend

a llison

a.

a.

a.j.

a.j.

a.j.

a.j. cody

a.kiddy a.k.a aatesh

aaa

aaa

aaaaathomas

aaabrayden

aab

aabe

aadhya

aadi

aadit
aaidyn
aalap
aaliayah
aaliya
aaliyah
aaliyah
aaliyah
aaliyah
aaman
aamir
aananadita
aanna
aansh
aaradhya
aaranea
aarathi
aardvark
aaren
aarna
aaron
aaron
aaron
aaron
aaron and raymond
aaron q
aarush
aatesh
aatesh
aatesh
aatesh
ab.
abb

abbe
abbey
abbey
abbey
abbey
abbi
abbi
abbi
abbie
abbie
abbie
abby
abby
abby
abby
abby
abdoo
abdu
abdul

5. Starting with the above query, add the grade of each of the authors.
- a. SQL: `SELECT TOP 76 Author.Name, Grade.Name from Author
JOIN Grade on Grade.Id = Author.GradeId
ORDER BY Author.Name ASC;`
 - b.
 - c. Name Grade
.lilly 2nd Grade
.morgan 5th Grade
.tyler.t and julian.c. 3rd Grade
a 3rd Grade
a 1st Grade
a 5th Grade
a 4th Grade

a friend 5th Grade
a llison 5th Grade
a. 5th Grade
a. 4th Grade
a.j. 4th Grade
a.j. 5th Grade
a.j. 2nd Grade
a.j. cody 4th Grade
a.kiddy a.k.a aatesh 5th Grade
aaa 5th Grade
aaa 3rd Grade
aaaaathomas 5th Grade
aaabrayden 5th Grade
aab 1st Grade
aabe 5th Grade
aadhya 1st Grade
aadi 5th Grade
aadit 4th Grade
aaidyn 2nd Grade
aalap 5th Grade
aaliayah 5th Grade
aaliya 4th Grade
aaliyah 4th Grade
aaliyah 5th Grade
aaliyah 3rd Grade
aaliyah 1st Grade
aaman 4th Grade
aamir 4th Grade
aananadita 5th Grade
aanna 1st Grade
aansh 5th Grade
aaradhya 2nd Grade
aaranea 3rd Grade

aarathi 1st Grade
aardvark 5th Grade
aaren 4th Grade
aarna 5th Grade
aaron 5th Grade
aaron 3rd Grade
aaron 2nd Grade
aaron 4th Grade
aaron and raymond 4th Grade
aaron q 4th Grade
aarush 3rd Grade
aatesh 3rd Grade
aatesh 2nd Grade
aatesh 5th Grade
aatesh 4th Grade
ab. 1st Grade
abb 4th Grade
abbe 5th Grade
abbey 5th Grade
abbey 1st Grade
abbey 3rd Grade
abbey 4th Grade
abbi 4th Grade
abbi 3rd Grade
abbi 5th Grade
abbie 5th Grade
abbie 3rd Grade
abbie 4th Grade
abby 4th Grade
abby 3rd Grade
abby 2nd Grade
abby 1st Grade
abby 5th Grade

abdoo 2nd Grade

abdu 1st Grade

abdul 5th Grade

6. Starting with the above query, add the recorded gender of each of the authors.

a. SQL: SELECT TOP 76 Author.Name, Grade.Name, Gender.Name from
Author

JOIN Grade on Grade.Id = Author.GradeId

JOIN Gender on Gender.Id = Author.GenderId

ORDER BY Author.Name ASC;

b. Name Grade Gender

.lilly 2nd Grade NA

.morgan 5th Grade NA

.tyler.t and julian.c. 3rd Grade NA

a 3rd Grade NA

a 1st Grade NA

a 5th Grade NA

a 4th Grade NA

a friend 5th Grade NA

a llison 5th Grade NA

a. 5th Grade NA

a. 4th Grade NA

a.j. 4th Grade NA

a.j. 5th Grade NA

a.j. 2nd Grade NA

a.j. cody 4th Grade NA

a.kiddy a.k.a aatesh 5th Grade NA

aaa 5th Grade NA

aaa 3rd Grade NA

aaaaathomas 5th Grade NA

aaabrayden 5th Grade NA

aab 1st Grade NA

aadhya 1st Grade Female

aadi	5th Grade	Male
aadit	4th Grade	Male
aaidyn	2nd Grade	Male
aalap	5th Grade	NA
aaliayah	5th Grade	NA
aaliya	4th Grade	Female
aaliyah	4th Grade	Female
aaliyah	5th Grade	Female
aaliyah	3rd Grade	Female
aaliyah	1st Grade	Female
aaman	4th Grade	NA
aamir	4th Grade	Male
aanadanadita	5th Grade	NA
aanna	1st Grade	NA
aansh	5th Grade	Male
aaradhya	2nd Grade	Female
aaranea	3rd Grade	NA
aarathi	1st Grade	NA
aardvark	5th Grade	NA
aaren	4th Grade	Male
aarna	5th Grade	Female
aaron	5th Grade	Male
aaron	3rd Grade	Male
aaron	2nd Grade	Male
aaron	4th Grade	Male
aaron and raymond	4th Grade	NA
aaron q	4th Grade	NA
aarush	3rd Grade	Male
aatesh	3rd Grade	NA
aatesh	2nd Grade	NA
aatesh	5th Grade	NA
aatesh	4th Grade	NA
ab.	1st Grade	NA

abb	4th Grade	NA
abbe	5th Grade	NA
abbey	5th Grade	Female
abbey	1st Grade	Female
abbey	3rd Grade	Female
abbey	4th Grade	Female
abbi	4th Grade	Female
abbi	3rd Grade	Female
abbi	5th Grade	Female
abbie	5th Grade	Female
abbie	3rd Grade	Female
abbie	4th Grade	Female
abby	4th Grade	Female
abby	3rd Grade	Female
abby	2nd Grade	Female
abby	1st Grade	Female
abby	5th Grade	Female
abdoo	2nd Grade	NA
abdu	1st Grade	NA
abdul	5th Grade	Male
abdullah	5th Grade	Male

7. What is the total number of words in all poems in the database?
 - a. SQL: SELECT SUM(WordCount) from Poem;
 - b. 374584
8. Which poem has the fewest characters?
 - a. SQL: SELECT Poem.Title, Author.Name from Poem
 JOIN Author on Author.Id = Poem.AuthorId
 Where CharCount = (SELECT MIN(CharCount) from Poem);
 - b. Hi by Bill.
9. How many authors are in the third grade?
 - a. SQL: SELECT Count(Author.Id) from Author
 JOIN Grade on Grade.Id = Author.GradeId
 Where Grade.Name = '3rd Grade';
 - b. 2,344

10. How many authors are in the first, second or third grades?

- a. SQL: SELECT Count(Author.Id) from Author
JOIN Grade on Grade.Id = Author.GradeId
Where Grade.Name in ('1st Grade','2nd Grade','3rd Grade');
- b. 4,044

11. What is the total number of poems written by fourth graders?

- a. SQL: SELECT Count(Poem.Id) from Poem
JOIN Author on Author.Id = Poem.AuthorId
JOIN Grade on Grade.Id = Author.GradeId
Where Grade.Name in ('4th Grade');
- b. 10,806

12. How many poems are there per grade?

- a. SQL: SELECT Grade.Name,Count(Poem.Id) as "Total Poems" from Poem
JOIN Author on Author.Id = Poem.AuthorId
JOIN Grade on Grade.Id = Author.GradeId
Group by Grade.Name;
- b. Name Total Poems
1st Grade 886
2nd Grade 3160
3rd Grade 6636
4th Grade 10806
5th Grade 11354

13. How many authors are in each grade? (Order your results by grade starting with 1st Grade)

- a. SQL: SELECT Grade.Name,Count(Author.Id) as "Total Authors" from Author
JOIN Grade on Grade.Id = Author.GradeId
Group by Grade.Name;
- b. Name Total Authors
1st Grade 623
2nd Grade 1437
3rd Grade 2344
4th Grade 3288
5th Grade 3464

14. What is the title of the poem that has the most words?

- a. SQL: SELECT Poem.Title, Author.Name FROM Poem
JOIN Author ON Author.Id=Poem.AuthorId
WHERE Poem.WordCount =(SELECT MAX(WordCount) FROM Poem);

b. The Mysterious Black by ansley

15. Which author(s) have the most poems? (Remember authors can have the same name.)

- a. SQL: SELECT TOP 5 Author.Name, COUNT(Poem.Id) as "Total Poems" FROM Poem

JOIN Author ON Author.Id=Poem.AuthorId

GROUP BY Author.Id, Author.Name

ORDER BY COUNT(Poem.Id) DESC;

b. Name Total Poems

jessica 118

emily 115

emily 98

ashley 94

jessica 93

16. How many poems have an emotion of sadness?

- a. SQL: SELECT Emotion.Name, COUNT(Poem.Id) as "Total Poems" FROM Poem

JOIN PoemEmotion on Poem.Id = PoemEmotion.PoemId

JOIN Emotion on Emotion.Id = PoemEmotion.EmotionId

WHERE Emotion.Name = 'Sadness'

GROUP BY Emotion.Id, Emotion.Name;

b. Name Total Poems

Sadness 14570

17. How many poems are not associated with any emotion?

- a. SQL: SELECT COUNT(Poem.Id) as "Total Poems" FROM Poem

LEFT OUTER JOIN PoemEmotion on Poem.Id = PoemEmotion.PoemId

WHERE PoemEmotion.Id IS NULL;

b. Total Poems

3368

18. Which emotion is associated with the least number of poems?

- a. SQL: SELECT TOP 1 Emotion.Name,COUNT(Poem.Id) as "Total Poems"
FROM Poem

JOIN PoemEmotion on Poem.Id = PoemEmotion.PoemId

JOIN Emotion on Emotion.Id = PoemEmotion.EmotionId

GROUP BY Emotion.Id,Emotion.Name

ORDER BY COUNT(Poem.Id) ASC;

- b. Name Total Poems

Anger 11105

19. Which grade has the largest number of poems with an emotion of joy?

- a. SQL: SELECT TOP 1 Grade.Name, Emotion.Name as
"Emotion",COUNT(Poem.Id) as "Total Poems" FROM Poem

JOIN Author on Author.Id = Poem.AuthorId

JOIN Grade on Grade.Id = Author.GradeId

JOIN PoemEmotion on Poem.Id = PoemEmotion.PoemId

JOIN Emotion on Emotion.Id = PoemEmotion.EmotionId

WHERE Emotion.Name = 'Joy'

GROUP BY Emotion.Id,Emotion.Name, Grade.Name

ORDER BY COUNT(Poem.Id) DESC;

- b. Name Emotion Total Poems

5th Grade Joy 8928

20. Which gender has the least number of poems with an emotion of fear?

- a. SQL: SELECT TOP 1 Gender.Name as "Gender", Emotion.Name as
"Emotion",COUNT(Poem.Id) as "Total Poems" FROM Poem

JOIN Author on Author.Id = Poem.AuthorId

JOIN Gender on Gender.Id = Author.GenderId

JOIN Grade on Grade.Id = Author.GradeId

JOIN PoemEmotion on Poem.Id = PoemEmotion.PoemId

JOIN Emotion on Emotion.Id = PoemEmotion.EmotionId

WHERE Emotion.Name = 'Fear'

GROUP BY Emotion.Id,Emotion.Name, Gender.Name

ORDER BY COUNT(Poem.Id) ASC;

- b. Gender Emotion Total Poems

Ambiguous Fear 1435

