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| |  |  |  |  | | --- | --- | --- | --- | | **Table Name** | **Column Name** | **Data Type** |  | | **annual\_2016** | id | smallint | Primary key | |  | series\_id | nvarchar |  | |  | year | smallint |  | |  | period | nvarchar |  | |  | value | float |  | |  | footnote\_codes | nvarchar |  | |  | original\_file | nvarchar |  | | **datatype** | data\_type\_code | tinyint | Primary key | |  | data\_type\_text | nvarchar |  | | **footnote** | footnote\_code | nvarchar | Primary key | |  | footnote\_text | nvarchar |  | | **industry** | id | smallint | Primary key | |  | industry\_code | bigint |  | |  | naics\_code | nvarchar |  | |  | publishing\_status | nvarchar |  | |  | industry\_name | nvarchar |  | |  | display\_level | float |  | |  | selectable | nvarchar |  | |  | sort\_sequence | float |  | | **january\_2017** | id | bigint | Primary key | |  | series\_id | nvarchar |  | |  | year | smallint |  | |  | period | nvarchar |  | |  | value | float |  | |  | footnote\_codes | nvarchar |  | |  | original\_file | nvarchar |  | | **period** | period\_code | nvarchar | PK | |  | month\_abbr | nvarchar |  | |  | month | nvarchar |  | | **seasonal** | industry\_code | nvarchar |  | |  | seasonal\_text | nvarchar |  | | **series** | series\_id | nvarchar | PK | |  | supersector\_code | bigint |  | |  | industry\_code | nvarchar |  | |  | data\_type\_code | bigint |  | |  | seasonal | nvarchar |  | |  | series\_title | nvarchar |  | | **supersector** | supersector\_code | tinyint | PK | |  | supersector\_name | nvarchar |  | |
|  |
| **Key Relationships Summary** |
| |  |  |  |  | | --- | --- | --- | --- | | **From Table** | **Column** | **To Table** | **Referenced Column** | | annual\_2016 | series\_id | series | series\_id | | annual\_2016 | period | period | period\_code | | annual\_2016 | footnote\_codes | footnote | footnote\_code | | january\_2017 | series\_id | series | series\_id | | january\_2017 | period | period | period\_code | | january\_2017 | footnote\_codes | footnote | footnote\_code | | series | data\_type\_code | datatype | data\_type\_code | | series | supersector\_code | supersector | supersector\_code | | series | industry\_code | industry | industry\_code | | series | seasonal | seasonal | seasonal\_text | | seasonal | industry\_code | industry | industry\_code | |

## Database Exploration

2. What is the datatype for women employees?

Answer: nvarchar

3. What is the series id for women employees in the commercial banking industry in the financial activities supersector?

Answer:: CES5552211010, CEU5552211010

select S.series\_id, s.series\_title, i.industry\_name, ss.supersector\_name

from LaborStatisticsDB.dbo.series AS S

INNER JOIN LaborStatisticsDB.dbo.industry AS I ON I.industry\_code = S.industry\_code

INNER JOIN LaborStatisticsDB.dbo.supersector SS ON SS.supersector\_code =S.supersector\_code

where s.series\_title ='WOMEN EMPLOYEES'

AND I.industry\_name ='Commercial banking'

AND ss.supersector\_name='Financial activities'

## Aggregate Your Friends and Code some SQL

Put together the following:

1. How many employees were reported in 2016 in all industries? Round to the nearest whole number.

Answer: 2340612

SELECT round(sum(value),0) employee\_count

from LaborStatisticsDB.dbo.annual\_2016 A2016

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =A2016.series\_id

where s.series\_title ='ALL EMPLOYEES'

2. How many women employees were reported in 2016 in all industries? Round to the nearest whole number.

Answer: 1125490

SELECT round(sum(value),0) women\_employee\_count

from LaborStatisticsDB.dbo.annual\_2016 A2016

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =A2016.series\_id

where s.series\_title ='WOMEN EMPLOYEES'

3. How many production/nonsupervisory employees were reported in 2016? Round to the nearest whole number.

Answer: 1263650

SELECT round(sum(value),0) employee\_count

from LaborStatisticsDB.dbo.annual\_2016 A2016

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =A2016.series\_id

where s.series\_title ='PRODUCTION AND NONSUPERVISORY EMPLOYEES'

4. In January 2017, what is the average weekly hours worked by production and nonsupervisory employees across all industries?

Answer:79473

SELECT round(sum(j2017.value),0) avg\_hours

from LaborStatisticsDB.dbo.january\_2017 j2017

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =j2017.series\_id

where s.series\_title ='Average weekly hours of production and nonsupervisory employees'

5. What is the total weekly payroll for production and nonsupervisory employees across all industries in January 2017? Round to the nearest penny.

Answer:1838753220

SELECT round(sum(j2017.value),0) employee\_count

from LaborStatisticsDB.dbo.january\_2017 j2017

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =j2017.series\_id

INNER JOIN LaborStatisticsDB.dbo.industry AS I ON i.industry\_code =s.industry\_code

where s.series\_title ='AGGREGATE WEEKLY PAYROLLS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES'

order by employee\_count

6. In January 2017, for which industry was the average weekly hours worked by production and nonsupervisory employees the highest? Which industry was the lowest?

Answer: industry\_name avg\_hours

NULL 5160

General freight trucking 832

SELECT i.industry\_name,round(sum(j2017.value),0) avg\_hours

from LaborStatisticsDB.dbo.january\_2017 j2017

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =j2017.series\_id

INNER JOIN LaborStatisticsDB.dbo.industry AS I ON i.industry\_code =s.industry\_code

where s.series\_title ='Average weekly hours of production and nonsupervisory employees'

GROUP BY i.industry\_name

order by avg\_hours desc

7. In January 2017, for which industry was the total weekly payroll for production and nonsupervisory employees the highest? Which industry was the lowest?

Answer:

industry\_name employee\_count

Highest Total private 295944946

Lowest Coin-operated laundries and drycleaners 40448

SELECT i.industry\_name, round(sum(j2017.value),0) employee\_count

from LaborStatisticsDB.dbo.january\_2017 j2017

INNER JOIN LaborStatisticsDB.dbo.series AS S ON S.series\_id =j2017.series\_id

INNER JOIN LaborStatisticsDB.dbo.industry AS I ON i.industry\_code =s.industry\_code

where s.series\_title ='AGGREGATE WEEKLY PAYROLLS OF PRODUCTION AND NONSUPERVISORY EMPLOYEES'

GROUP BY i.industry\_name

order by employee\_count desc