

How have American baby name tastes changed since 1920? Which names have remained popular for over 100 years, and how do those names compare to more recent top baby names? These are considerations for many new parents, but the skills you'll practice while answering these queries are broadly applicable. After all, understanding trends and popularity is important for many businesses, too!

You'll be working with data provided by the United States Social Security Administration, which lists first names along with the number and sex of babies they were given to in each year. For processing speed purposes, the dataset is limited to first names which were given to over 5,000 American babies in a given year. The data spans 101 years, from 1920 through 2020.

The Data

baby_names		
column	type	description
year	int	year
first_name	varchar	first name
sex	varchar	sex of babies given [first_name]
num	int	number of babies of sex given first_name in that year

Projects Data DataFrame as usa_baby_names

-- Run this code to view the data in baby_names

SELECT *
FROM baby_names
LIMIT 5;

index ··· ↑↓	year ··· ↑↓	first_name ••• ↑↓	sex ··· ↑↓	num ···
0	1920	Mary	F	70
1	1920	Dorothy	F	36
2	1920	Helen	F	35
3	1920	Margaret	F	27
4	1920	Ruth	F	26

Rows: 5 <u>↓</u>

```
Projects Data DataFrame as name_typesUse this table for the answer to question 1:
```

```
-- List the overall top five names in alphabetical order and find out if each name is "Classic" or
"Trendy."

SELECT
    first_name,
    SUM(num) AS sum,
    CASE WHEN COUNT(year) >= 50 THEN 'Classic'
    ELSE 'Trendy' END AS popularity_type

FROM baby_names

GROUP BY first_name

ORDER BY first_name

LIMIT 5;
```

index ··· ↑↓	first_name ··· ↑↓	sum ··· ↑↓	popularity_type ···
0	Aaliyah	15870	Trendy
1	Aaron	530592	Classic
2	Abigail	338485	Trendy
3	Adam	497293	Trendy
4	Addison	107433	Trendy

Rows: 5 <u>↓</u>

```
Projects Data DataFrame as top_20
```

```
-- Use this table for the answer to question 2:
-- What were the top 20 male names overall, and how did the name Paul rank?
SELECT
     RANK() OVER(ORDER BY SUM(num) DESC) AS name_rank,
     first_name,
     SUM(num) AS sum
FROM baby_names
WHERE sex = 'M'
GROUP BY first_name
LIMIT 20;
```

index ··· ↑↓	name_rank ··· ↑↓	first_name \cdots \uparrow_{\downarrow}	sum ··· ↑↓
0	1	James	4748 ^
1	2	John	4510
2	3	Robert	4495
3	4	Michael	4278
4	5	William	3614
5	6	David	3571
6	7	Richard	2414
7	8	Joseph	2361
8	9	Thomas	2166
9	10	Charles	2112
10	11	Christopher	2012
11	12	Daniel	1824
12	13	Matthew	1567
13	14	Anthony	1344
14	15	Donald	1280
15	16	Mark	1265

Rows: 20 <u>↓</u>

Projects Data
DataFrame as a_names

```
-- Use this table for the answer to question 3:
-- Which female names appeared in both 1920 and 2020?
SELECT
    first_name,
    SUM(num) AS total_occurrences
FROM baby_names
WHERE sex = 'F' AND first_name IN
    (SELECT a_19.first_name
    FROM baby_names AS a_19
    INNER JOIN (SELECT a_20.first_name
    FROM baby_names AS a_20
```

WHERE a_20.year = 2020) AS sub
USING(first_name)
WHERE a_19.year = 1920)
GROUP BY first_name;

••• ↑↓	fi ••• ↑↓	total_occurre ··· ↑↓
0	Grace	254573
1	Elizabeth	1436286
2	Eleanor	119863
3	Evelyn	310824
4	Hazel	66103
5	Emma	448087