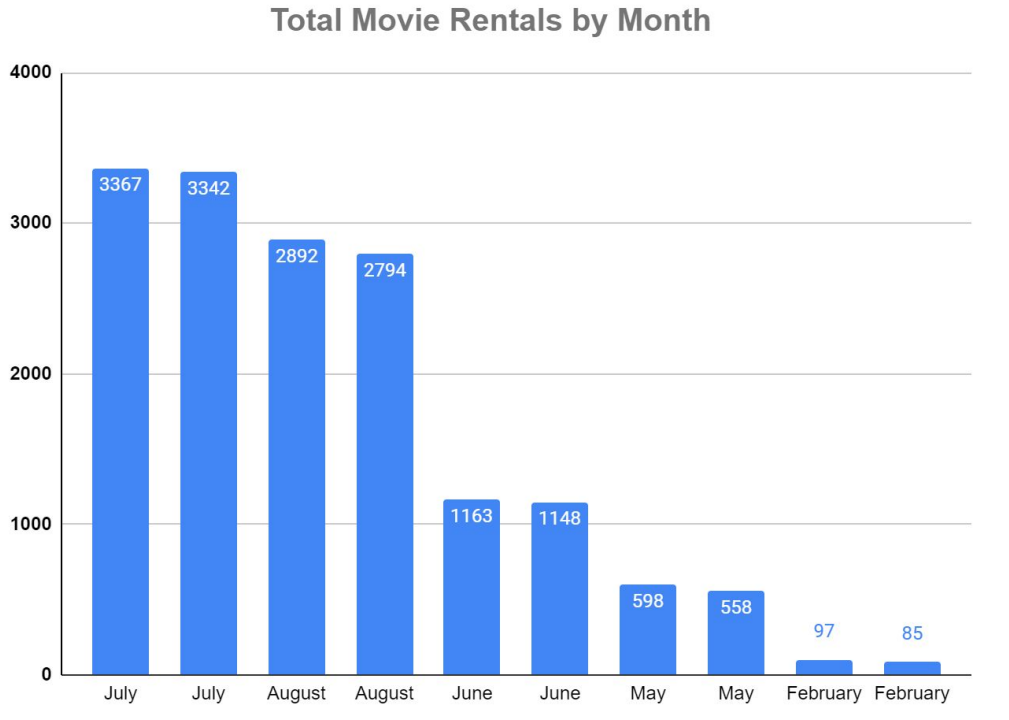
Question #1:



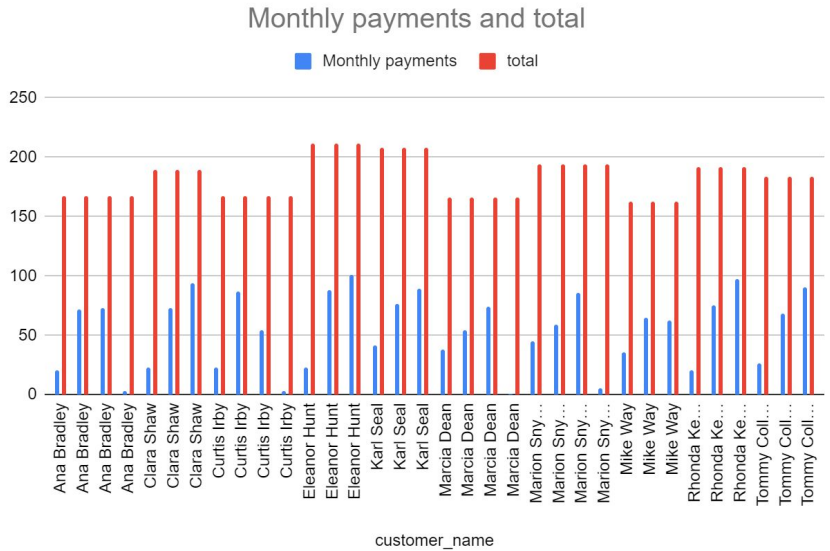
Answer: Months with most and least rentals are July (most) and February (least)

What month stores rent the most movies and least?

```
/SELECT store_id, yr,
CASE
   WHEN mnt = '1' THEN 'January'
   WHEN mnt = '2' THEN 'February'
   WHEN mnt = '3' THEN 'March'
            WHEN mnt = '4' THEN 'April'
            WHEN mnt = '5' THEN 'May'
            WHEN mnt = '6' THEN 'June'
            WHEN mnt = '7' THEN 'July'
            WHEN mnt = '8' THEN 'August'
            WHEN mnt = '9' THEN 'September'
            WHEN mnt = '10' THEN 'October'
            WHEN mnt = '11' THEN 'Novemeber'
            ELSE 'December'
END AS monthi, t_count total_rentals

FROM (SELECT EXTRACT(year FROM r.rental_date) as Yr,
EXTRACT(month FROM r.rental_date) as mnt,
st.store_id AS store_id, COUNT(r.*) t_count
FROM rental r
JOIN staff s
ON s.staff_id= r.staff_id
JOIN store st
ON st.store_id = s.store_id
GROUP BY yr, mnt, st.store_id
ORDER BY t_count DESC) sub
```

SET 1 Question #2:



Answer:
The top ten customers are Ana Bradley, Clara Shaw, Curtis Irby, Eleanor Hunt, Karl Seal, Marcia Dean, Marion Snyder, Mike Way, Rhonda Kennedy, Tommy Collazo.
Eleanor Hunt had the most in total payments.

Who are the top 10 paying customers and what is the total payment amount they made per each month? Total in that yr

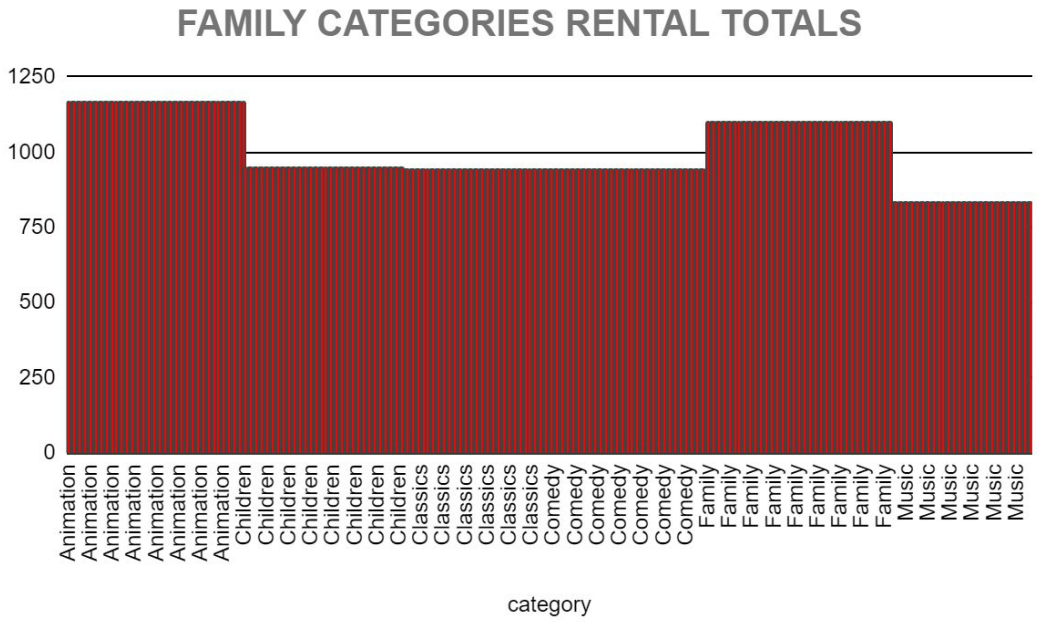
```
/**TOP 10 payments by customer id*/
WITH top_10 AS
(SELECT customer_id cust_id, SUM(amount) AS total_payments
  FROM payment
  GROUP BY cust_id
  ORDER BY total_payments DESC
  LIMIT 10),

/*full name of customers most payments by month*/
monthpay AS
(SELECT customer_id cust_id, DATE_TRUNC('month', p.payment_date) date_payment,
SUM(p.amount) total_payment
FROM payment p
GROUP BY  customer_id, date_payment),

customers AS
(/*JOIN tables to get top 10 paying customers*/
SELECT CONCAT(c.first_name, ' ', c.last_name) customer_name, monthpay.date_payment
date_payment,
monthpay.total_payment total_payment
FROM top_10
JOIN monthpay
ON top_10.cust_id = monthpay.cust_id
JOIN customer c
ON monthpay.cust_id = c.customer_id
ORDER by customer_name, date_payment)

SELECT customer_name, date_payment, total_payment,
SUM(total_payment) OVER (PARTITION BY customer_name) total
FROM customers
```

Question #3:



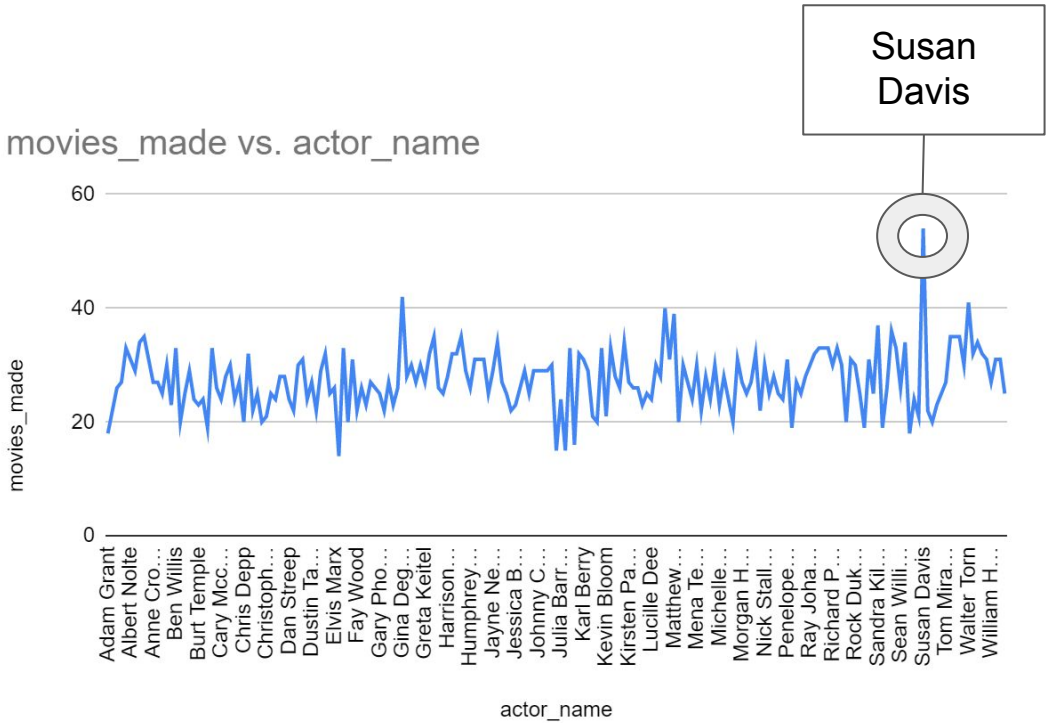
Answer:
The Family Category that was rented the most was the Animation category

Lists each movie, the film category it is classified in, the number of times it has been rented out, and how many total times family movies were rented by category? Which family category was rented the most?
Animation

```
WITH t1 AS
(SELECT f.title movie, c.name category,
 AVG(f.rental_duration) duration,
 COUNT(r.*) AS rentals
FROM film f
JOIN film_category fc ON f.film_id = fc.film_id
JOIN category c ON fc.category_id = c.category_id
JOIN inventory i ON i.film_id = f.film_id
JOIN rental r ON i.inventory_id = r.inventory_id
WHERE c.name = 'Animation' OR c.name = 'Children'
OR c.name ='Classics' OR c.name = 'Comedy' OR c.name
='Family'
OR c.name = 'Music'
GROUP BY movie, category
ORDER BY category)

SELECT t1.movie "Name of movie", t1.category "category",
t1.rentals "Number of times rented",
SUM(rentals) OVER(PARTITION BY t1.category ORDER BY
t1.category) "total rentals by category"
FROM t1
```

Question #4:



Answer:
Susan Davis with 54 movies next closest actor is Gina Degeneres w/ 42

Which actor/actress made the most movies?

```
/*actor and movies they appear*/
WITH t1 AS
(select CONCAT(a.first_name, ' ', a.last_name)
actor_name, f.title nameofmovie
from actor a
JOIN film_actor fa
ON a.actor_id = fa.actor_id
JOIN film f
ON f.film_id = fa.film_id
GROUP BY actor_name, f.title
ORDER BY actor_name),

/*how many movies from the database the actor is in*/
t2 AS
(SELECT actor_name, nameofmovie,
COUNT(nameofmovie) OVER(PARTITION BY
actor_name) AS movies_with_sameactor
FROM t1)

SELECT actor_name, MAX(movies_with_sameactor)
movies_made
FROM t2
GROUP BY actor_name
```