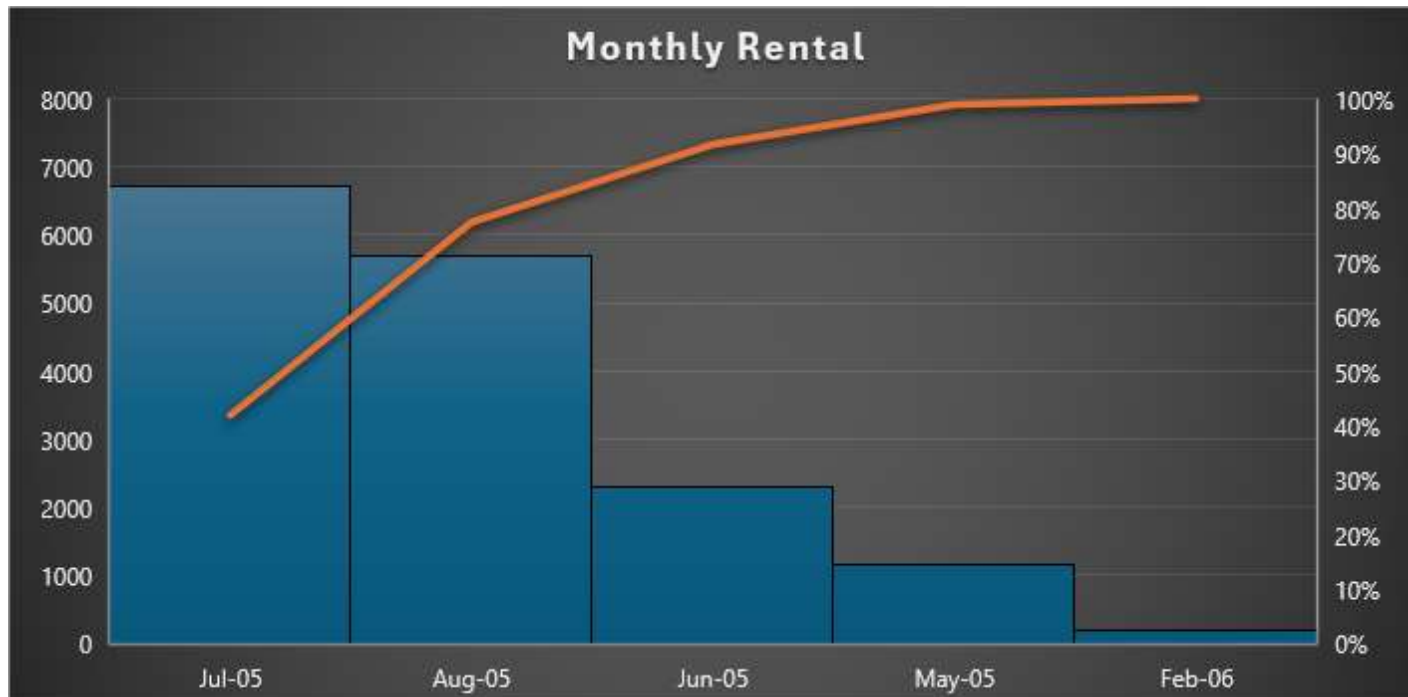


Name : Savan Patel

Mini Capstone Project

1. Analyze the monthly rental trends over the available data period.

```
select date_format(rental_date, '%Y - %m') as rental_date, count(rental_id) as total_rentals
from rental
group by date_format(rental_date, '%Y - %m')
order by total_rentals desc
```



rental_date	total_rentals
2005 - 07	6709
2005 - 08	5686
2005 - 06	2311
2005 - 05	1156
2006 - 02	182

## Insights

- In the month of July 2005, the highest number of movies were rented, while In the month of February 2006, only 186 movies were rented.
- In May 2005, 1156 movies were rented which is almost half of the month of June 2005.

## Recommendation:

- It is better to sell the movies after the first six months of the year.

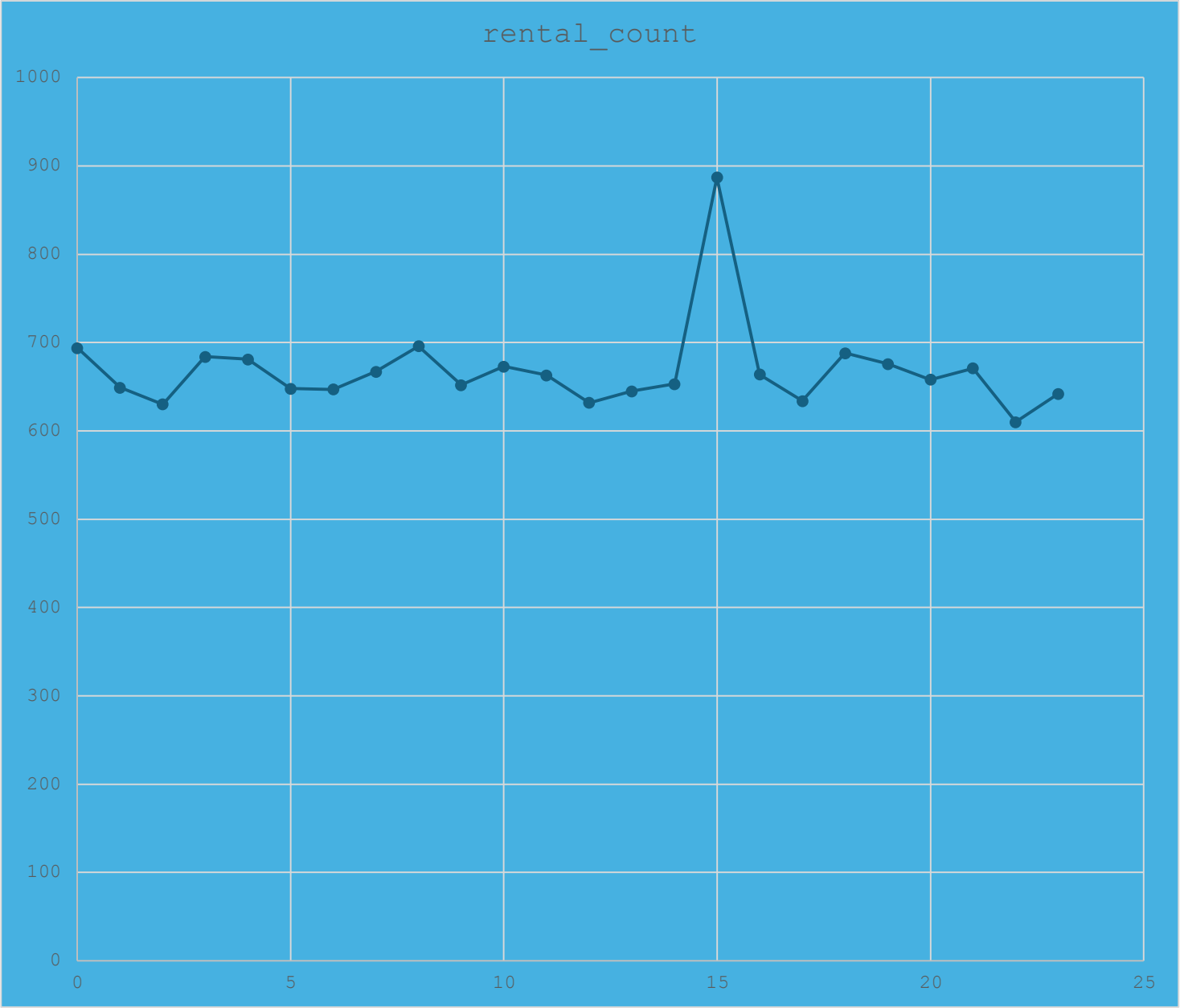
## 2. Determine the peak rental hours in a day based on rental transactions.

```
select hour(rental_date) as rental_hour, count(rental_date) as rental_count
from rental
group by rental_hour
order by rental_hour desc;
```

### Insight

- The graph clearly shows at 3 pm most of the films were rented.
- Apart from these, most of the hours were almost similar.

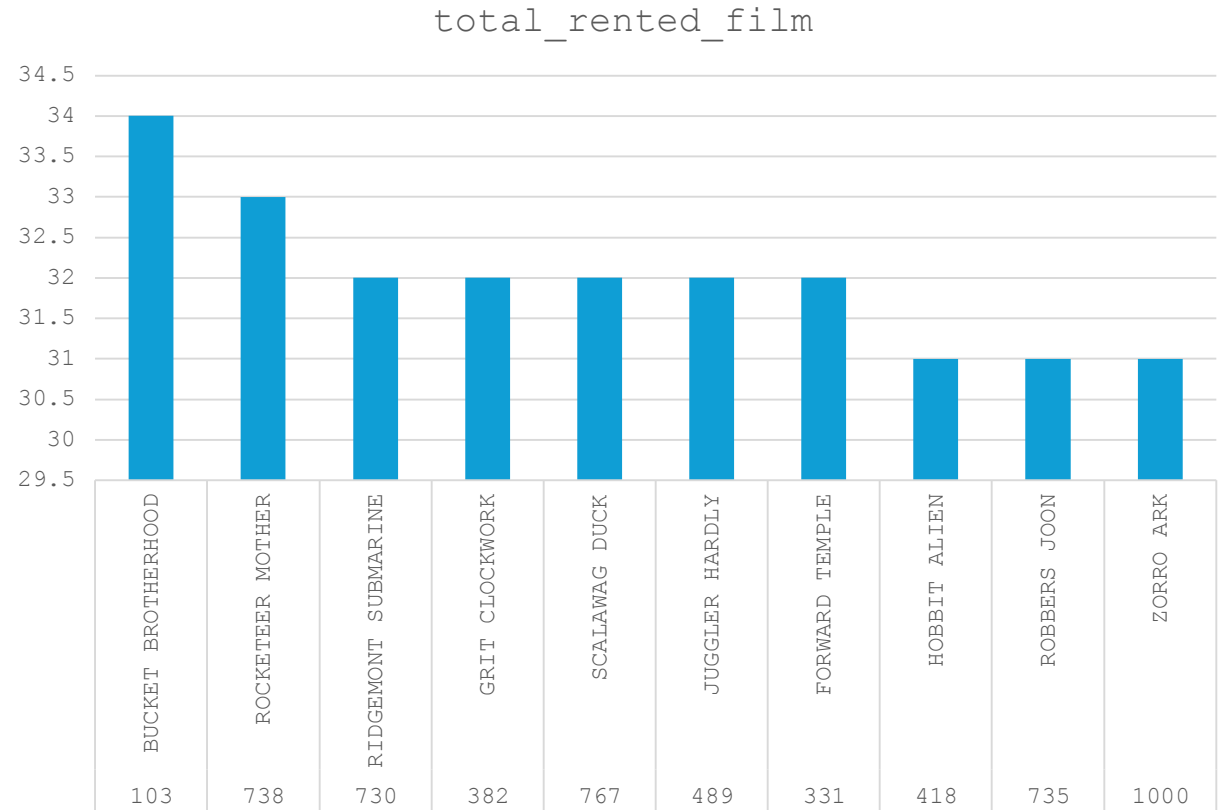
rental_hour	rental_count
23	642
22	610
21	671
20	658
19	676
18	688
17	634
16	664
15	887
14	653
13	645
12	632
11	663
10	673
9	652
8	696
7	667
6	647
5	648
4	681
3	684
2	630
1	649
0	694



- 3. Identify the top 10 most rented films.

film_id	title	total_rented_film
103	BUCKET BROTHERHOOD	34
738	ROCKETEER MOTHER	33
730	RIDGEMONT SUBMARINE	32
382	GRIT CLOCKWORK	32
767	SCALAWAG DUCK	32
489	JUGGLER HARDLY	32
331	FORWARD TEMPLE	32
418	HOBBIT ALIEN	31
735	ROBBERS JOON	31
1000	ZORRO ARK	31

```
select f.film_id , f.title, count(r.rental_id) as total_rented_film
from rental r
JOIN inventory i ON i.inventory_id = r.inventory_id
JOIN film f ON f.film_id = i.film_id
group by f.film_id ,f.title
order by count(r.rental_id) desc limit 10
```



## Insight

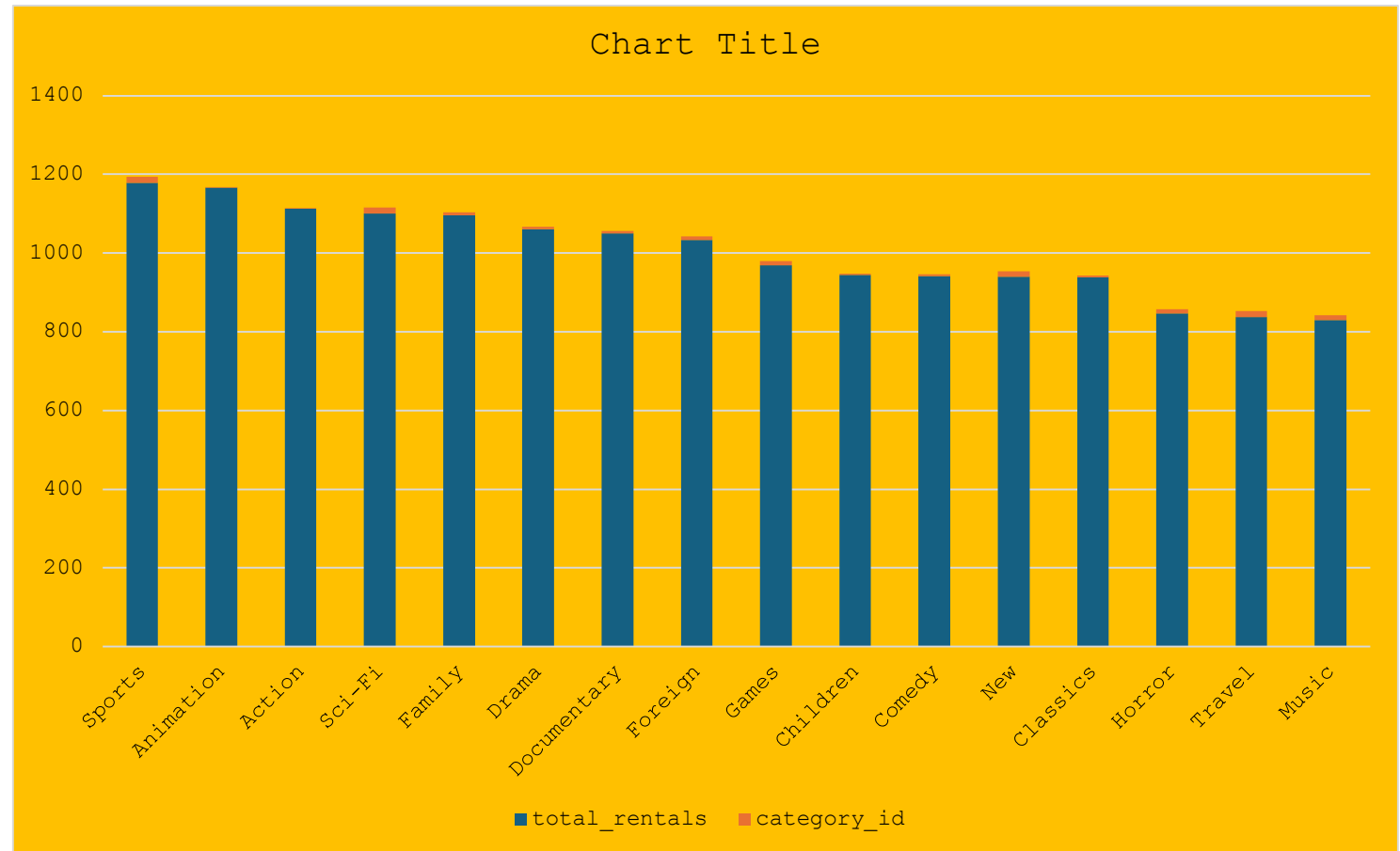
- The film Bucket Brotherhood is most rented movie .
- There is not a big difference between top 10 movies which is rented.

4. Determine which film categories have the highest number of rentals.

- The film category which has highest number of rentals is Sports and Lowest number of rental is Music.
- The movie animation , drama , action has also more than 1000 rentals.
- Horror , travel movie is less like by the people.



category_id	name	total_rentals
15	Sports	1179
2	Animation	1166
1	Action	1112
14	Sci-Fi	1101
8	Family	1096
7	Drama	1060
6	Documentary	1050
9	Foreign	1033
10	Games	969
3	Children	945
5	Comedy	941
13	New	940
4	Classics	939
11	Horror	846
16	Travel	837
12	Music	830



```

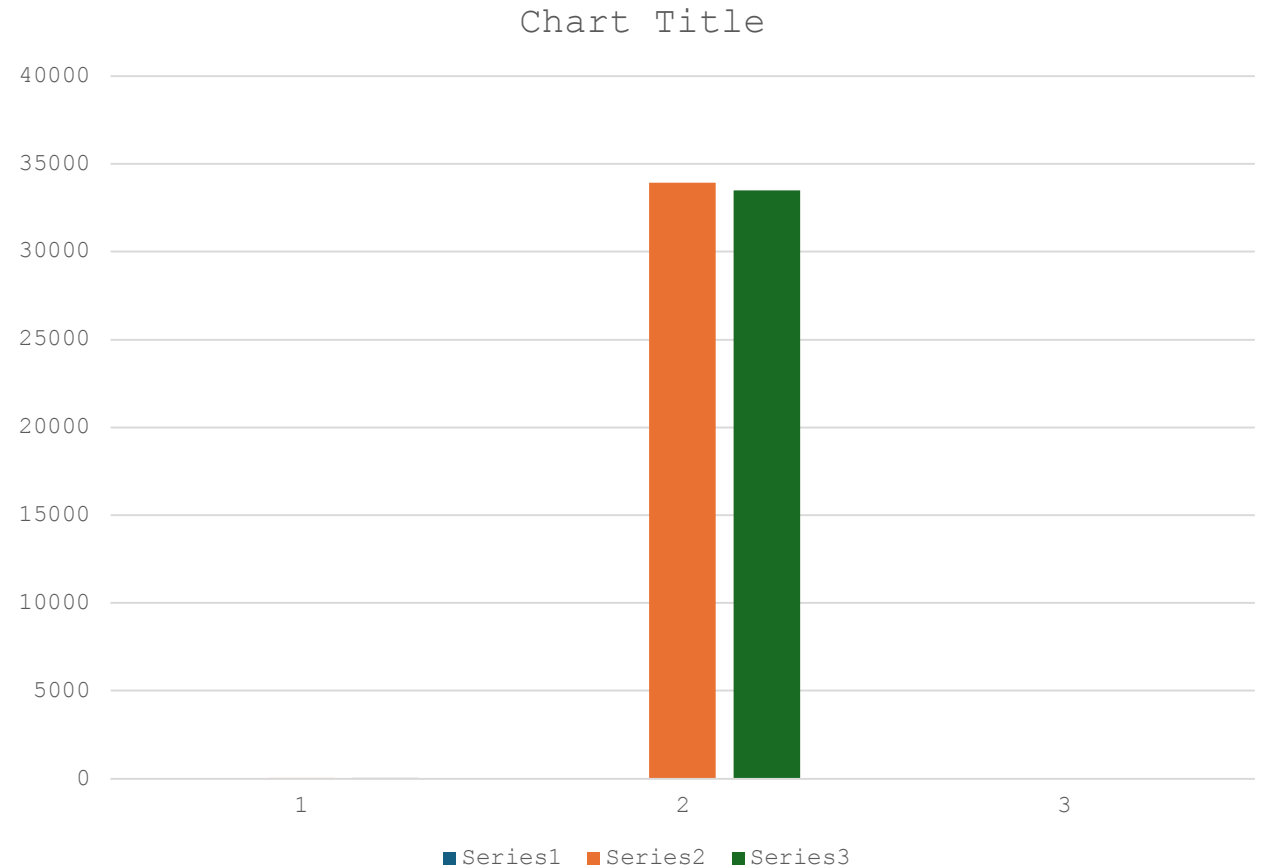
select c.category_id ,t.name, count(r.rental_id) as total_rentals
from rental r
JOIN inventory i ON i.inventory_id = r.inventory_id
JOIN film_category c ON c.film_id = i.film_id
JOIN category t ON t.category_id = c.category_id
group by c.category_id
order by count(r.rental_id) desc |

```

# 5. Identify which store generates the highest rental revenue.

```
select s.store_id, sum(p.amount) as total_revenue
from store s
JOIN staff f ON f.store_id = s.store_id
JOIN payment p ON p.staff_id = f.staff_id
group by s.store_id
order by sum(p.amount) desc
```

store_id	total_revenue
2	33927.04
1	33489.47

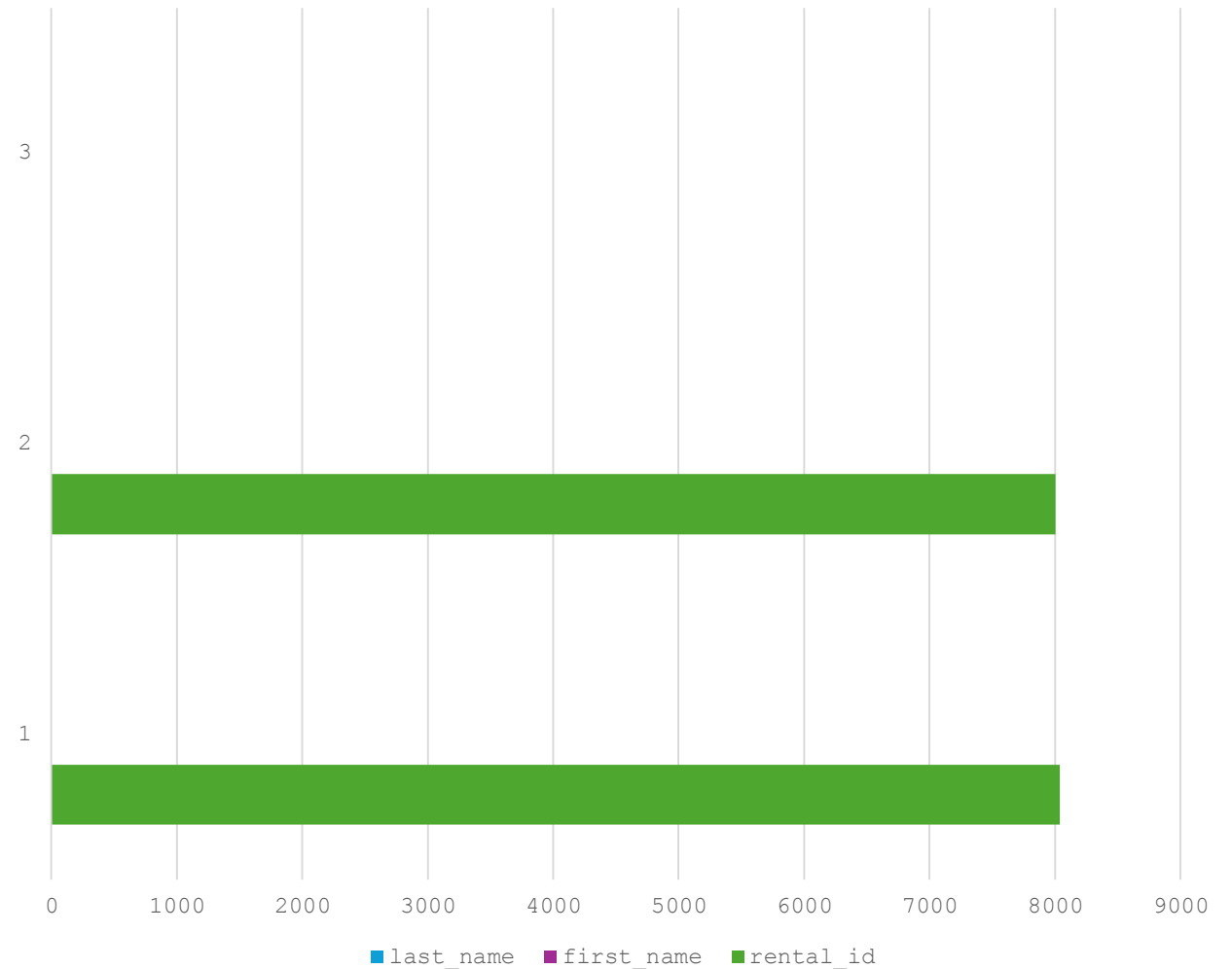


- Second number store generates the highest rental revenue.
- Its like they have good quality and might be less price as compared to store 1.

6. Determine the distribution of rentals by staff members to assess performance.

```
select count(r.rental_id) as rental_id , s.first_name,s.last_name
from staff s
JOIN store t ON t.store_id = s.store_id
JOIN rental r ON r.staff_id = s.staff_id
group by s.first_name,s.last_name
order by count(r.rental_id) desc
```

rental_id	first_name	last_name
8040	Mike	Hillyer
8004	Jon	Stephens



- The mike Hillyer has performed well as compared to Jon Stephens.