

# Shark\_Tank SQL Case study

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This is Shark tank data which is for 3 season, Although another person has already addressed the following ten queries, I am solving them using my own logic and not copying from any other sources.

I am using Microsoft Sql management studio for solving these question

10 Sql question :

1. You Team must promote shark Tank India season 4, The senior come up with the idea to show highest funding domain wise so that new startups can be attracted, and you were assigned the task to show the same.
2. You have been assigned the role of finding the domain where female as pitchers have female to male pitcher ratio >70%
3. You are working at marketing firm of Shark Tank India, you have got the task to determine volume of per season sale pitch made, pitches who received offer and pitches that were converted. Also show the percentage of pitches converted and percentage of pitches entertained.
4. As a venture capital firm specializing in investing in startups featured on a renowned entrepreneurship TV show, you are determining the season with the highest average monthly sales and identify the top 5 industries with the highest average monthly sales during that season to optimize investment decisions?
5. As a data scientist at our firm, your role involves solving real-world challenges like identifying industries with consistent increases in funds raised over multiple seasons. This requires focusing on industries where data is available across all three seasons. Once these industries are pinpointed, your task is to delve into the specifics, analyzing the number of pitches made, offers received, and offers converted per season within each industry.
6. Every shark wants to know in how much year their investment will be returned, so you must create a system for them, where shark will enter the name of the startup's and the based on the total deal and equity given in how many years their principal amount will be returned and make their investment decisions.
7. In the world of startup investing, we're curious to know which big-name investor, often referred to as "sharks," tends to put the most money into each deal on average. This comparison helps us see who's the most generous with their investments and how they measure up against their fellow investors.
8. Develop a stored procedure that accepts inputs for the season number and the name of a shark. The procedure will then provide detailed insights into the total investment made by that specific shark across different industries during the specified season. Additionally, it will calculate the percentage of their investment in each sector relative to the total investment in that year, giving a comprehensive understanding of the shark's investment distribution and impact.

I have solve 7 question:

1. You Team must promote shark Tank India season 4, The senior come up with the idea to show highest funding domain wise so that new startups can be attracted, and you were assigned the task to show the same.

```
select top 10 industry,sum(cast(total_deal_amount_in_lakhs as float))as total_amt from dataset_st
group by industry
order by total_amt desc
```

2. You have been assigned the role of finding the domain where female as pitchers have female to male pitcher ratio >70%

```
with t1 as(
select industry,sum(cast (male_presenters as float))as male,sum(cast (female_presenters as float))as female from dataset_st
group by industry)
select *,(female*100/male)as total_pcmt from t1
where (female*100/male)>70
```

3. You are working at marketing firm of Shark Tank India, you have got the task to determine volume of per season sale pitch made, pitches who received offer and pitches that were converted. Also show the percentage of pitches converted and percentage of pitches entertained.

```
with total_pitch as(
select season_number, count(pitch_number)as total_pitch from dataset_st
group by season_number),
received_offer as(
onvert_pitch from dataset_st
where received_offer='Yes'
group by season_number)
select total_pitch.season_number,total_pitch,convert_pitch,(convert_pitch*100/total_pitch)as per
from total_pitch
join received_offer on total_pitch.season_number=received_offer.season_number
select season_number, count(pitch_number)as c
```

4. As a venture capital firm specializing in investing in startups featured on a renowned entrepreneurship TV show, you are determining the season with the highest average monthly sales and identify the top 5 industries with the highest average monthly sales during that season to optimize investment decisions?

```

select top 5 Industry,avg(cast(Monthly_Sales_in_lakhs as float))as total_avg_amt from dataset_ST
where Season_Number in(
        select top 1 Season_Number from (
            select season_number,avg(cast(Monthly_Sales_in_lakhs as float))as avg_amount from dataset_st
            where Monthly_Sales_in_lakhs !='Not Mentioned'
            group by season_number
        )x
        order by x.avg_amount desc)
and Monthly_Sales_in_lakhs !='Not Mentioned'
group by Industry
order by total_avg_amt desc

```

5. As a data scientist at our firm, your role involves solving real-world challenges like identifying industries with consistent increases in funds raised over multiple seasons. This requires focusing on industries where data is available across all three seasons. Once these industries are pinpointed, your task is to delve into the specifics, analyzing the number of pitches made, offers received, and offers converted per season within each industry.

```

with t1 as(
    select * from dataset_st
    where Industry in(
        select x.Industry from (
            select Industry,sum(cast (Total_Deal_Amount_in_lakhs as float))as total_funds,
                sum (case when Season_Number=1 then cast (Total_Deal_Amount_in_lakhs as float) end)season_
                1,
                sum (case when Season_Number=2 then cast (Total_Deal_Amount_in_lakhs as float) end)season_
                2,
                sum (case when Season_Number=3 then cast (Total_Deal_Amount_in_lakhs as float) end)season_3
            from dataset_st
            group by Industry)x
        where x.season_1 is not null and x.season_2 is not null and x.season_3 is not null
        and x.season_3>x.season_2 and x.season_2>x.season_1)
    ),
piches as(
    select Industry,count(Industry)as Total_Piches from t1
    group by Industry),
rece_offer as(
    select Industry,count(Industry)as Total_received from t1
    where Received_Offer='Yes'
    group by Industry)

select piches.Industry>Total_Piches>Total_received,(Total_received *100/Total_Piches)as Total_piched_convrt from piches
join rece_offer on piches.Industry=rece_offer.Industry

```

6. Every shark wants to know in how much year their investment will be returned, so you must create a system for them, where shark will enter the name of the startup's and the based on the total deal and equity given in how many years their principal amount will be returned and make their investment decisions.

```

SELECT
    startup_name,
    cast(Yearly_Revenue_in_lakhs as float)as Yearly_Revenue_in_lakhs,
    cast(Total_Deal_Amount_in_lakhs as float)as Total_Deal_Amount_in_lakhs,
    cast(Total_Deal_Equity as float)as Total_Deal_Equity,
    CAST(Total_Deal_Amount_in_lakhs AS FLOAT) /
    (CAST(Yearly_Revenue_in_lakhs AS FLOAT) * (CAST(Total_Deal_Equity AS FLOAT) / 100)) AS years_to_break_even
FROM
    dataset_ST
WHERE
    Yearly_Revenue_in_lakhs <> 'Not Mentioned'
    AND CAST(Yearly_Revenue_in_lakhs AS FLOAT) > 0
    AND Accepted_Offer = 'yes'
    and Startup_Name='BoozScooters'

```

7. In the world of startup investing, we're curious to know which big-name investor, often referred to as "sharks," tends to put the most money into each deal on average. This comparison helps us see who's the most generous with their investments and how they measure up against their fellow investors.

```

with main as (
    select 'Namita' as shark,cast(Namita_Investment_Amount_in_lakhs as float )as Investment from dataset_ST where Namita_Investment_Amount_in_lakhs>'0'

```

```

union all
select 'Anupam' as shark,cast(Anupam_Investment_Amount_in_lakhs as float )as Investment from dataset_ST where
Anupam_Investment_Amount_in_lakhs>'0'
union all
select 'Aman' as shark,cast(Aman_Investment_Amount_in_lakhs as float )as Investment from dataset_ST where Aman_Investment_Amount_in_lakhs>'0'
union all
select 'Peyush' as shark,cast(Peyush_Investment_Amount_in_lakhs as float )as Investment from dataset_ST where Peyush_Investment_Amount_in_lakhs>'0'
union all
select 'Amit' as shark,cast(Amit_Investment_Amount_in_lakhs as float )as Investment from dataset_ST where Amit_Investment_Amount_in_lakhs>'0'
union all
select 'Ashneer' as shark,cast(Ashneer_Investment_Amount as float )as Investment from dataset_ST where Ashneer_Investment_Amount>'0'
)
select main.shark,round(AVG(main.investment),2)as Avg_investment from main
where main.investment >0
group by main.shark
order by Avg_investment desc

```