

1. Who prefers energy drink more? (male/female/non-binary?)

Solution-

```
WITH CTE1 AS (  
    SELECT  
        f.Respondent_ID,  
        ds.gender  
    FROM fact_survey_responses f  
    LEFT JOIN dim_repondents ds  
    ON f.Respondent_ID = ds.Respondent_ID  
)  
CTE2 AS (  
    SELECT  
        Respondent_ID,  
        gender  
    FROM CTE1  
    WHERE gender = 'female'  
)  
SELECT  
    (SELECT  
        COUNT(*)  
    FROM CTE2  
    WHERE gender = 'female') AS Female_Count,  
    (SELECT  
        COUNT(*)  
    FROM CTE1  
    WHERE gender = 'male') AS Male_Count;
```

Result Grid			Filter Rows:	
	Female_Count	Male_Count		
▶	3455	6038		

2. Which age group prefers energy drinks more?

Solution-

```
with CTE1 as (SELECT  
    f.Respondent_ID,  
    ds.gender,  
    ds.Age  
FROM fact_survey_responses f  
LEFT JOIN dim_repondents ds  
ON f.Respondent_ID = ds.Respondent_ID)  
  
select  
    Age,  
    count(*) as cnt  
from CTE1  
group by Age  
order by cnt desc;
```

Result Grid			Filter Rows:	
	Age	cnt		
▶	19-30	5520		
	31-45	2376		
	15-18	1488		
	46-65	426		
	65+	190		

3. What are the preferred ingredients of energy drinks among respondents?

Solution-

```
SELECT
    f.Ingredients_expected,
    count(f.Respondent_ID) as No_of_res
FROM fact_survey_responses f
LEFT JOIN dim_repondents ds
ON f.Respondent_ID = ds.Respondent_ID
group by f.Ingredients_expected
order by No_of_res desc;
```

Result Grid		Filter Rows:
	Ingredients_expected	No_of_res
▶	Caffeine	3896
	Vitamins	2534
	Sugar	2017
	Guarana	1553

4. What packaging preferences do respondents have for energy drinks?

Solution-

```
SELECT
    f.Packaging_preference,
    count(f.Respondent_ID) as No_of_respo
FROM fact_survey_responses f
LEFT JOIN dim_repondents ds
ON f.Respondent_ID = ds.Respondent_ID
group by f.Packaging_preference
order by No_of_respo desc;
```

Result Grid		Filter Rows:
	Packaging_preference	No_of_respo
▶	Compact and portable cans	3984
	Innovative bottle design	3047
	Collectible packaging	1501
	Eco-friendly design	983
	Other	485

5. Who are the current market leaders?

Solution-

```
SELECT
    f.Current_brands,
    count(f.Respondent_ID) as no_of_respo
FROM fact_survey_responses f
LEFT JOIN dim_repondents ds
ON f.Respondent_ID = ds.Respondent_ID
group by f.Current_brands
order by no_of_respo desc;
```

Result Grid		Filter Rows:	Exp
	Current_brands	no_of_respo	
▶	Cola-Coka	2538	
	Bepsi	2112	
	Gangster	1854	
	Blue Bull	1058	
	CodeX	980	
	Sky 9	979	
	Others	479	

6. Which marketing channel can be used to reach more customers?
Solution-

```
SELECT
    f.Marketing_channels,
    COUNT(f.Respondent_ID) AS no_of_respo
FROM
    fact_survey_responses f
LEFT JOIN
    dim_repondents ds
ON f.Respondent_ID = ds.Respondent_ID
GROUP BY
    f.Marketing_channels
ORDER BY
    no_of_respo DESC;
```

Marketing_channels	no_of_respo
Online ads	4020
TV commercials	2688
Outdoor billboards	1226
Other	1225
Print media	841

7. How effective are different marketing strategies and channels in reaching our customers?
Solution-

```
Select
    f.Marketing_channels,
    count(f.Current_brands) as cur_CodeX
FROM
    fact_survey_responses f
LEFT JOIN
    dim_repondents ds
ON f.Respondent_ID = ds.Respondent_ID
where f.Current_brands = 'CodeX'
group by f.Marketing_channels;
```

Marketing_channels	cur_CodeX
Online ads	411
Print media	73
TV commercials	261
Other	116
Outdoor billboards	119

8. What do people think about our brand? (overall rating)
Solution-

```
select
    Brand_perception,
    count(Brand_perception) as exp
from fact_survey_responses
where Current_brands='CodeX'
group by Brand_perception
order by exp desc;
```

Brand_perception	exp
Neutral	589
Positive	219
Negative	172

9. Which cities do we need to focus more on?

Solution-

```
Select
    c.city,
    count(f.Respondent_ID) as Num
from fact_survey_responses f
left join dim_repondents re
on f.Respondent_ID = re.Respondent_ID
left join dim_cities c
on re.City_ID = c.City_ID
where Current_brands != 'CodeX'
group by C.City
order by Num desc;
```

Result Grid | Filter Rows:

	city	Num
▶	Bangalore	2536
	Hyderabad	1651
	Mumbai	1354
	Chennai	845
	Pune	814
	Kolkata	518
	Ahmedabad	411
	Delhi	389
	Jaipur	332
	Lucknow	170

10. Where do respondents prefer to purchase energy drinks?

Solution-

```
Select
    Reasons_for_choosing_brands,
    count(Reasons_for_choosing_brands) as count
from fact_survey_responses
group by Reasons_for_choosing_brands
order by count desc;
```

Result Grid | Filter Rows:

	Reasons_for_choosing_brands	count
▶	Brand reputation	2652
	Taste/flavor preference	2011
	Availability	1910
	Effectiveness	1748
	Other	1679

11. What are the typical consumption situations for energy drinks among respondents?

Solution-

```
select
    Typical_consumption_situations,
    Count(Typical_consumption_situations) as count
from fact_survey_responses
group by Typical_consumption_situations
order by count desc;
```

Result Grid | Filter Rows:

	Typical_consumption_situations	count
▶	Sports/exercise	4494
	Studying/working late	3231
	Social outings/parties	1487
	Other	491
	Driving/commuting	297

12. What factors influence respondents purchase decisions, such as price range and limited edition packaging?

Solution-

```
select
    price_range,
    count(price_range) as cnt
from fact_survey_responses
group by Price_range
order by cnt desc;

select
    Limited_edition_packaging,
    count(Limited_edition_packaging) as cnt2
from fact_survey_responses
group by Limited_edition_packaging
order by cnt2 desc;
```

Result Grid | Filter Rows:

	price_range	cnt
▶	50-99	4288
	100-150	3142
	Above 150	1561
	Below 50	1009

Result Grid | Filter Rows:

	Limited_edition_packaging	cnt2
▶	No	4023
	Yes	3946
	Not Sure	2031

```
# 13. Which type of marketing reaches the most youth (15-30) ?
# Solution-
with cte1 as (
  select * from dim_repondents where age in ('15-18', '19-30')
)
select f.Marketing_channels, count(*) as cnt
from fact_survey_responses f
left join cte1 c
on f.Respondent_ID=c.Respondent_ID
group by f.Marketing_channels
order by cnt desc;
```

Result Grid			Filter Rows:
	Marketing_channels	cnt	
▶	Online ads	4020	
	TV commercials	2688	
	Outdoor billboards	1226	
	Other	1225	
	Print media	841	

Some suggestion I would like to give to the business according the Data I generated-

- # 1. Try to add caffeine and Vitamins in the Drink and make Compact and Portable with Innovative design for the Cans
- # 2. Try to Fix the price Between (50-150). Two types of cans would be ideal for starting, Small can (240 ml) and Bigger can (330 ml)
- # 3. Target audience should be aged between (15-30)
- # 4. Try to advertise more in Bangalore, Hyderabad, Mumbai