CODE BASICS RESUME PROJECT

Project Background:

Codex is a German beverage company that is aiming to make its mark in the Indian market. A few months ago, they launched their energy drink in 10 cities in India.

Their Marketing team is responsible for increasing brand awareness, market share, and product development. They conducted a survey in those 10 cities and received results from **10k** respondents. Peter Pandey, a marketing data analyst is tasked to convert these survey results to meaningful insights which the team can use to drive actions.

Datasets Required:

Dim Cities (the data related to respondents living location in India)

Dim Respondents (data related to the respondents, their unique ids, names, gender, age)

Fact_survey_Responses (1000 rows of data comprises of 10k responses)

Relationship b/w the datasets:

As the relationship is one-many and the scheme developed here is star where fact table is fact_survey responses & dimension tables are dim_cities,
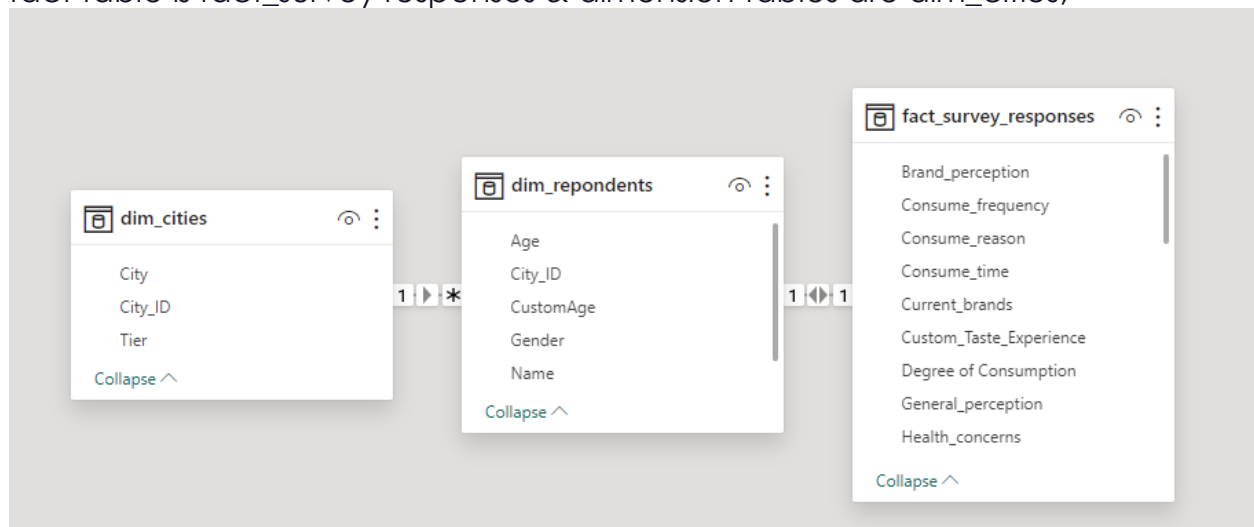
Analytical Questions:

1. Who prefers energy drink more (Male / Female / Non-Binary)

```
select count(r.Respondent_ID) as respondent_count,r.Gender from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
where fsr.Consume_frequency='Daily'
group by r.Gender
order by count(r.Respondent ID) desc;
```

respondent_count	Gender
817	Male
466	Female
63	Non-binary

2.Which age group prefer energy drink more?

```
with preferenergydrink as (
select count (r. Respondent_ID) as respondent_count, r. Age, case when fsr.
Consume_frequency='Daily' then 'High'
when fsr. Consume_frequency='Once a week' then 'low'
when fsr. Consume_frequency='Rarely' then 'very low'
else 'Moderate'
end as degree_of_consumption,
case when r. Age='15-18' then 'Adolescence'
when r. Age='19-30' then 'Young'
when r. Age='31-45' then 'Middle'
when r. Age='46-64' then 'Old'
else 'Senior'
end as Age_Groups
from fact_survey_responses as fsr
join dim_repondents as r.
on fsr. Respondent_ID=r.Respondent_ID
group by r. Age, fsr. Consume_frequency.
)
select
respondent_count, degree_of_consumption, Age_Groups
from preferenergydrink
order by respondent_count desc.
```

respondent_count	degree_of_consumption	Age_Groups
1917	Moderate	Young
1088	very low	Young
891	Moderate	Young
888	low	Young
809	Moderate	Middle
736	High	Young
539	Moderate	Adolescence
460	very low	Middle
398	Moderate	Middle
361	low	Middle

3. Which type of marketing reaches the most youth (15-30)

```
--Q#3 which type of marketing reaches the most youth (15-30)?
select count(r.Respondent_ID) as respondent_count,fsr.Marketing_channels from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
where Age in ('15-18','19-30')
group by fsr.Marketing_channels
order by count(r.Respondent_ID) desc;
```

respondent_count	Marketing_channels
3373	Online ads
1785	TV commercials
702	Other
702	Outdoor billboards
446	Print media

4. What are the preferred ingredients of energy drinks among respondents

```
select count(r.Respondent_ID) as respondent_count,fsr.Ingredients_expected from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Ingredients_expected
order by count(r.Respondent_ID) desc;
```

respondent_count	Ingredients_expected
3896	Caffeine
2534	Vitamins
2017	Sugar
1553	Guarana

5. What are the packaging preferences do we have for energy drinks?

```
select count(r.Respondent_ID) as respondent_count,fsr.Packaging_preference from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Packaging_preference |
order by count(r.Respondent_ID) desc;
```

respondent_count	Packaging_preference
3984	Compact and portable cans
3047	Innovative bottle design
1501	Collectible packaging
983	Eco-friendly design
485	Other

6. Who are the current market leaders

```
select top 3 count(r.Respondent_ID) as respondent_count,fsr.Current_brands from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Current_brands |
order by count(r.Respondent_ID) desc;
```

respondent_count	Current_brands
2538	Cola-Coka
2112	Bepsi
1854	Gangster

7. What are the primary reasons consumer prefer those brands over us?

```
WITH primaryreason AS (
    SELECT
        COUNT(r.Respondent_ID) AS respondent_count,
        fsr.Current_brands,
        fsr.Reasons_for_choosing_brands
    FROM
        fact_survey_responses AS fsr
    JOIN
        dim_repondents AS r ON fsr.Respondent_ID = r.Respondent_ID
    GROUP BY
        fsr.Current_brands, fsr.Reasons_for_choosing_brands
)

SELECT
    respondent_count,
    Current_brands,
    Reasons_for_choosing_brands
FROM
    primaryreason
WHERE
    Current_brands IN ('Cola-Coka', 'Bepsi', 'Gangster')
    order by respondent_count desc;
```

respondent_count	Current_brands	Reasons_for_choosing_brands
616	Cola-Coka	Brand reputation
577	Bepsi	Brand reputation
531	Cola-Coka	Taste/flavor preference
511	Gangster	Brand reputation
510	Cola-Coka	Availability
448	Cola-Coka	Other
433	Cola-Coka	Effectiveness
423	Bepsi	Taste/flavor preference
418	Bepsi	Availability
357	Gangster	Taste/flavor preference

8. Which marketing channel can be used to reach more customers?

```
select  count(r.Respondent_ID)  as respondent_count,fsr.Marketing_channels from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Marketing_channels
order by count(r.Respondent_ID) desc;
```

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

9.what do people think about our brand

```
select  count(r.Respondent_ID)  as respondent_count,fsr.Brand_perception from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Brand_perception
order by count(r.Respondent_ID) desc;
```

respondent_count	Brand_perception
5974	Neutral
2257	Positive
1769	Negative

9. Which cities we need to more focus on ?

```
select count(r.Respondent_ID) as responsecount,c.City from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
join dim_cities as c
on r.City_ID=c.City_ID
group by c.City
order by count(r.Respondent_ID) asc;
```

responsecount	City
175	Lucknow
360	Jaipur
429	Delhi
456	Ahmedabad
566	Kolkata
906	Pune
937	Chennai
1510	Mumbai
1833	Hyderabad
2828	Bangalore

10. Where do respondents prefer to purchase energy drinks

```
select fsr.Purchase_location,count(r.Respondent_ID) as respondant_count from fact_survey_responses as fsr
join dim_repondents as r
on fsr.Respondent_ID=r.Respondent_ID
group by fsr.Purchase_location
order by count(r.Respondent_ID) desc
```

Purchase_location	respondant_count
Supermarkets	4494
Online retailers	2550
Gyms and fitness centers	1464
Local stores	813
Other	679

Q#11 what factors influence repondents purchase decision like price range and limited edition packaging?

respondant_count	Price_range	Limited_edition_packagin
1679	50-99	Yes
1741	50-99	No
639	Above 150	No
1263	100-150	Yes
600	Above 150	Yes
1244	100-150	No
404	Below 50	Yes
399	Below 50	No

Q#12: which area of business should we focus more on product development?

```sql
SELECT top 10
    COUNT(r.Respondent_ID) AS respondent_count,
    fsr.Taste_experience,
    fsr.Brand_perception,
    fsr.Reasons_preventing_trying
FROM
    fact_survey_responses AS fsr
JOIN
    dim_repondents AS r ON fsr.Respondent_ID = r.Respondent_ID
GROUP BY
    fsr.Taste_experience,
    fsr.Brand_perception,
    fsr.Reasons_preventing_trying
order by COUNT(r.Respondent_ID) desc
```

respondent_count	Taste_experience	Brand_perception	Reasons_preventing_trying
453	3	Neutral	Not available locally
398	3	Neutral	Health concerns
370	3	Neutral	Not interested in energy drinks
352	4	Neutral	Health concerns
346	4	Neutral	Not available locally
343	4	Neutral	Not interested in energy drinks
296	3	Neutral	Unfamiliar with the brand
294	5	Neutral	Not available locally
282	5	Neutral	Health concerns
269	4	Neutral	Unfamiliar with the brand

	Count of Responses	% of Responses from Online Ads	% of Responses Tried Before	Avg Taste Experience	% of Brand_Perception_Positive
	10K	40	49	3	23

Taste_Exp
- ☐ Average
- ☐ Below Average
- ☐ Excellent
- ☐ Good

Age Groups
- ☐ Adolescence
- ☐ Middle
- ☐ Old
- ☐ Senior
- ☐ Young

Marketing Channels
- ☐ Online ads
- ☐ Other
- ☐ Outdoor billboards
- ☐ Print media
- ☐ TV commercials

Purchase Location
- ☐ Gyms and fitness centers
- ☐ Local stores
- ☐ Online retailers
- ☐ Other
- ☐ Supermarkets

City	Adolescence	Middle	Old	Senior	Young	Total
Ahmedabad	58	120	18	4	256	456
Bangalore	433	686	107	55	1547	2828
Chennai	141	218	38	20	520	937
Delhi	69	109	20	7	224	429
Hyderabad	264	425	89	40	1015	1833
Jaipur	60	85	14	3	198	360
Kolkata	82	143	22	9	310	566
Lucknow	30	46	3	1	95	175
Mumbai	228	333	65	30	854	1510
Pune	123	211	50	21	501	906

ResponseCount I Degree of Consumption

Moderate | Very Low (5K / 2K)
Low | High (2K / 1K)

ResponseCount I Gender
- 1K (5%)
- 3K (35%)
- 6K (60%)
- ● Male
- ● Female
- ● Non binary

ResponseCount I Ingredients Liked
- 2K (16%)
- 4K (39%)
- 2K (20%)
- 3K (25%)
- ● Caffeine
- ● Vitamins
- ● Sugar
- ● Guarana

ResponseCount I Brand Perception
- Neutral 6.0K
- Positive 2.3K
- Negative 1.8K