SQL Queries for Administration Challenge

Preliminary Data Analysis

Questions	SQL Query

What are the names of the top 3 campaigns by the amount of money pledged?
 	
Linked to "1-PreliminaryAnalysisSQL" sheet on "PreliminaryAnalysisSQL.xlsx" file
	``sql
	SELECT cam.name as campaign_name,
	cat.name,sub.name, cam.pledged, curr.name as
	currency
	FROM campaign cam INNER JOIN sub_category sub ON
	cam.sub_category_id = sub.id
	INNER JOIN currency curr ON cam.currency_id =
	curr.id
	INNER JOIN category cat ON sub.category_id =
	cat.id
	ORDER BY pledged DESC
	LIMIT 3
	``

Determine if the funding goal differs significantly between successful and failed campaigns.
 	
Linked to "2-PreliminaryAnalysisSQL" sheet on "PreliminaryAnalysisSQL.xlsx" file
	``sql
	SELECT cat.name as campaign_category, outcome,
	AVG(goal) as avg_goal
	FROM campaign cam INNER JOIN sub_category sub ON
	cam.sub_category_id = sub.id
	INNER JOIN currency curr ON cam.currency_id =
	curr.id
	INNER JOIN category cat ON sub.category_id =
	cat.id
	WHERE curr.name = 'USD' AND (outcome =
	'successful')
	``

| | ```sql
GROUP BY campaign_category, outcome;


SELECT cat.name as campaign_category, outcome,
AVG(goal) as avg_goal
FROM campaign cam INNER JOIN sub_category sub ON
cam.sub_category_id = sub.id
INNER JOIN currency curr ON cam.currency_id =
curr.id
INNER JOIN category cat ON sub.category_id =
cat.id
WHERE curr.name = 'USD' AND (outcome = failed)
GROUP BY campaign_category, outcome;
``` |
| Name the three countries that had the highest number of campaigns.<br><br>Assume: include all possible outcomes<br><br>**Linked to "3-PreliminaryAnalysisSQL" sheet on "PreliminaryAnalysisSQL.xlsx" file** | ```sql
SELECT coun.name as country_name, count(*) AS
count_campaigns
FROM campaign cam INNER JOIN country coun ON
cam.country_id = coun.id
GROUP BY coun.name
ORDER BY count_campaigns DESC
LIMIT 3;
``` |
| What is the average amount pledged per backer for successful campaigns?<br><br>Assume: Group the average amount pledged per backer for successful campaigns by category and consider USD only based on the scope of the business problem<br><br>**Linked to "4-PreliminaryAnalysisSQL" sheet on "PreliminaryAnalysisSQL.xlsx" file** | ```sql
SELECT cat.name as campaign_category,
ROUND(SUM(pledged)/SUM(backers),2) AS
avg_pledged_per_backer
FROM campaign cam INNER JOIN sub_category sub ON
cam.sub_category_id = sub.id
INNER JOIN currency curr ON cam.currency_id =
curr.id
``` |

| | ```sql
INNER JOIN category cat ON sub.category_id =
cat.id
WHERE outcome = 'successful' and curr.name =
'USD'
GROUP BY cat.name
ORDER BY avg_pledged_per_backer DESC;
``` |
| How many sub-categories have an average per backer pledge greater than 250 dollars? (Hint: after the GROUP BY clause, the aggregates are filtered with a HAVING clause).<br><br>Assume: Considered USD only based on the scope of the business problem<br><br>**Linked to "5-PreliminaryAnalysisSQL" sheet on "PreliminaryAnalysisSQL.xlsx" file** | ```sql
SELECT COUNT(*)
FROM (
SELECT cat.name as cat_name,sub.name as
sub_cat_name,round(SUM(pledged)/SUM(backers),2)
as avg_pledged_per_backers
FROM campaign cam INNER JOIN sub_category sub ON
cam.sub_category_id = sub.id
INNER JOIN currency curr ON cam.currency_id =
curr.id
INNER JOIN category cat ON sub.category_id =
cat.id
WHERE curr.name = 'USD'
GROUP BY cat_name, sub_cat_name
HAVING avg_pledged_per_backers > 250
ORDER BY avg_pledged_per_backers DESC);
``` |

Data Visualization

Description	SQL Query
| Returns the average goals of successful and failed game campaigns<br><br>**Linked to "1-DV" sheet on "DataVisualization.xlsx" file** | ```sql
SELECT sub.name as campaign_sub_category,
outcome, round(AVG(goal),2) as avg_goal
FROM campaign cam INNER JOIN sub_category sub ON
cam.sub_category_id = sub.id
INNER JOIN currency curr ON cam.currency_id =
curr.id
INNER JOIN category cat ON sub.category_id =
cat.id
WHERE curr.name = 'USD' AND outcome = 'failed'
AND cat.name = 'Games'
GROUP BY campaign_sub_category, outcome;


SELECT sub.name as campaign_sub_category,
outcome, round(AVG(goal),2) as avg_goal
FROM campaign cam INNER JOIN sub_category sub ON
cam.sub_category_id = sub.id
INNER JOIN currency curr ON cam.currency_id =
curr.id
INNER JOIN category cat ON sub.category_id =
cat.id
WHERE curr.name = 'USD' AND outcome =
'successful' AND cat.name = 'Games'
GROUP BY campaign_sub_category, outcome;
``` |

Returns the average backers of successful game campaigns
 	
Linked to "2-DV" sheet on "DataVisualization.xlsx" file
	``sql
	SELECT sub.name as campaign_sub_category,
	outcome, round(AVG(backers)) as avg_backer
	FROM campaign cam INNER JOIN sub_category sub ON
	cam.sub_category_id = sub.id
	INNER JOIN currency curr ON cam.currency_id =
	curr.id
	INNER JOIN category cat ON sub.category_id =
	cat.id
	WHERE curr.name = 'USD' AND outcome =
	'successful' AND cat.name = 'Games'
	GROUP BY campaign_sub_category, outcome
	ORDER BY avg_backer;
	``

Returns the average pledged per backer for all game campaigns
 	
Linked to "3-DV" sheet on "DataVisualization.xlsx" file
	``sql
	SSELECT sub.name as campaign_sub_category,
	round(AVG(pledged/backers),2) as
	avg_pledged_per_backer
	FROM campaign cam INNER JOIN sub_category sub ON
	cam.sub_category_id = sub.id
	INNER JOIN currency curr ON cam.currency_id =
	curr.id
	INNER JOIN category cat ON sub.category_id =
	cat.id
	WHERE curr.name = 'USD' AND outcome =
	'successful' AND cat.name = 'Games'
	GROUP BY campaign_sub_category
	ORDER BY avg_pledged_per_backer;
	``

Returns the successful and failed tabletop campaign pledges with funding goals of USD 15,000	```sql
	SELECT cam.name as table_top_cam, pledged, goal,
	``

Linked to "4-DV" sheet on "DataVisualization.xlsx" file	``` outcome FROM campaign cam INNER JOIN sub_category sub ON cam.sub_category_id = sub.id INNER JOIN currency curr ON cam.currency_id = curr.id INNER JOIN category cat ON sub.category_id = cat.id WHERE curr.name = 'USD' AND sub.name = 'Tabletop Games' and goal = 15000 AND outcome != 'canceled' GROUP BY table_top_cam ORDER BY pledged; ```
Return the average number of backers for successful tabletop campaigns with as funding goal of USD 15,000 **Linked to "5-DV" sheet on "DataVisualization.xlsx" file**	``` SELECT cam.name as table_top_cam, backers FROM campaign cam INNER JOIN sub_category sub ON cam.sub_category_id = sub.id INNER JOIN currency curr ON cam.currency_id = curr.id INNER JOIN category cat ON sub.category_id = cat.id WHERE curr.name = 'USD' AND sub.name = 'Tabletop Games' and goal = 15000 AND outcome = 'successful' GROUP BY table_top_cam ORDER BY backers; ```