

SQL Queries for Admission Challenge

Preliminary Data Analysis

Questions	SQL Query
<p>What are the names of the top 3 campaigns by the amount of money pledged?</p> <p>Linked to “1-PreliminaryAnalysisSQL” sheet on “PreliminaryAnalysisSQL.xlsx” file</p>	<pre>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</pre>
<p>Determine if the funding goal differs significantly between successful and failed campaigns.</p> <p>Linked to “2-PreliminaryAnalysisSQL” sheet on “PreliminaryAnalysisSQL.xlsx” file</p>	<pre>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')</pre>

	<pre> 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; </pre>
<p>Name the three countries that had the highest number of campaigns.</p> <p>Assume: include all possible outcomes</p> <p>Linked to “3-PreliminaryAnalysisSQL” sheet on “PreliminaryAnalysisSQL.xlsx” file</p>	<pre> 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; </pre>
<p>What is the average amount pledged per backer for successful campaigns?</p> <p>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</p> <p>Linked to “4-PreliminaryAnalysisSQL” sheet on “PreliminaryAnalysisSQL.xlsx” file</p>	<pre> 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 </pre>

	<pre>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;</pre>
<p>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).</p> <p>Assume: Considered USD only based on the scope of the business problem</p> <p>Linked to “5-PreliminaryAnalysisSQL” sheet on “PreliminaryAnalysisSQL.xlsx” file</p>	<pre>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);</pre>

Data Visualization

Description	SQL Query
<p>Returns the average goals of successful and failed game campaigns</p> <p>Linked to “1-DV” sheet on “DataVisualization.xlsx” file</p>	<pre>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;</pre>

<p>Returns the average backers of successful game campaigns</p> <p>Linked to “2-DV” sheet on “DataVisualization.xlsx” file</p>	<pre>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;</pre>
<p>Returns the average pledged per backer for all game campaigns</p> <p>Linked to “3-DV” sheet on “DataVisualization.xlsx” file</p>	<pre>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;</pre>
<p>Returns the successful and failed tabletop campaign pledges with funding goals of USD 15,000</p>	<pre>SELECT cam.name as table_top_cam, pledged, goal,</pre>

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;
```