1. **Select users whose id is either 3, 2, or 4:**

SELECT \* FROM users

WHERE id IN (3, 2, 4);

1. Count how many basic and premium listings each active user has:

SELECT u.first\_name, u.last\_name,

COUNT(CASE WHEN l.status = 2 THEN 1 END) AS basic,

COUNT(CASE WHEN l.status = 3 THEN 1 END) AS premium

FROM users u

LEFT JOIN listings l ON u.id = l.user\_id

WHERE u.status = 2

GROUP BY u.first\_name, u.last\_name;

1. Count how many basic and premium listings each active user has if they have at least one premium listing:

SELECT u.first\_name, u.last\_name,

COUNT(CASE WHEN l.status = 2 THEN 1 END) AS basic,

COUNT(CASE WHEN l.status = 3 THEN 1 END) AS premium

FROM users u

JOIN listings l ON u.id = l.user\_id

WHERE u.status = 2

AND EXISTS (SELECT 1 FROM listings

WHERE user\_id = u.id AND status = 3)

GROUP BY u.first\_name, u.last\_name;

1. How much revenue each active vendor has made in 2013:

SELECT u.first\_name, u.last\_name, c.currency,

SUM(c.price) AS revenue

FROM users u

JOIN listings l ON u.id = l.user\_id

JOIN clicks c ON l.id = c.listing\_id

WHERE u.status = 2 AND YEAR(c.created) = 2013

GROUP BY u.first\_name, u.last\_name, c.currency;

1. Insert a new click for listing ID 3 at $4.00 and retrieve the ID of the new click:

INSERT INTO clicks (listing\_id, price, currency, created)

VALUES (33,3, 4.00, 'USD', GETDATE());

SELECT MAX(id) AS id FROM clicks;

1. Show listings that have not received a click in 2013:

SELECT l.name AS listing\_name

FROM listings l

LEFT JOIN clicks c ON l.id = c.listing\_id AND YEAR(c.created) = 2013

WHERE c.id IS NULL;

1. For each year, show the number of listings clicked and the number of vendors who owned these listings:

SELECT

YEAR(c.created) AS year,

COUNT(DISTINCT c.listing\_id) AS total\_listings\_clicked,

COUNT(DISTINCT l.user\_id) AS total\_vendors\_affected

FROM

clicks c

JOIN

listings l ON c.listing\_id = l.id

GROUP BY

YEAR(c.created);

1. Return a comma-separated string of listing names for all active vendors:

SELECT

u.first\_name,

u.last\_name,

(

SELECT STRING\_AGG(l.name, ', ')

FROM listings l

WHERE l.user\_id = u.id

) AS listing\_names

FROM

users u

WHERE

u.status = 2;