**Sales Cube**

SELECT customer\_name,sum(quantity),sum(price) FROM sales.sale s NATURAL JOIN sales.customer c GROUP BY c.customer\_id

SELECT state\_name,sum(quantity), sum(price) FROM sales.sale s NATURAL JOIN sales.customer c NATURAL JOIN sales.state st GROUP BY st.state\_name

SELECT product\_id,sum(quantity),sum(price) AS dollar\_value FROM sales.sale s WHERE customer\_id =1 GROUP BY product\_id ORDER BY dollar\_value

SELECT product\_id,customer\_id,sum(price) AS dollar\_value FROM sales.sale GROUP BY product\_id,customer\_id ORDER BY dollar\_value

SELECT state\_name,ca.category\_id,sum(price) FROM

sales.sale sa NATURAL JOIN sales.customer cu NATURAL JOIN sales.state st NATURAL JOIN sales.category ca NATURAL JOIN sales.product p

GROUP BY state\_name,ca.category\_id

SELECT cate.category\_id,cust.customer\_id,sum(quantity),sum(price) FROM

(SELECT category\_id,sum(price) AS dollar\_value FROM

sales.category NATURAL JOIN sales.product NATURAL JOIN sales.sale

GROUP BY category\_id ORDER BY dollar\_value DESC limit 10) AS cate,

(SELECT customer\_id,sum(price) AS dollar\_value FROM sales.sale

GROUP BY customer\_id ORDER BY dollar\_value DESC limit 10) AS cust, sales.sale s,sales.product p

WHERE p.category\_id = cate.category\_id and s.customer\_id = cust.customer\_id and s.product\_id = p.product\_id

GROUP BY cate.category\_id,cust.customer\_id ORDER BY cate.category\_id

**Cats**

SELECT video\_id, COUNT(\*) AS like\_no FROM cats.likes GROUP BY video\_id ORDER BY like\_no DESC LIMIT 10

SELECT l.video\_id, COUNT(\*) AS like\_no FROM cats.friend f, cats.like l

WHERE f.user\_id=1 AND f.friend\_id=l.user\_id GROUP BY l.video\_id ORDER BY like\_no DESC LIMIT 10

SELECT l.video, COUNT(\*)

FROM (SELECT l.video\_id AS video, l.user\_id AS user1 FROM cats.friend f, cats.like l WHERE f.user\_id=1 AND f.friend\_id=l.user\_id

UNION

SELECT l.video\_id AS video, l.user\_id AS user1 FROM cats.friend f, cats.friend ff, cats.like l WHERE f.user\_id=1 AND f.friend\_id=ff.user\_id AND ff.user\_id=l.user\_id

) AS l

GROUP BY l.video

ORDER BY COUNT(\*) DESC LIMIT 10

SELECT l.video\_id, COUNT(\*) FROM cats.like l

WHERE l.user\_id IN (SELECT ly.user\_id FROM cats.like lx, cats.like ly WHERE lx.user\_id=1 AND lx.video\_id=ly.video\_id) GROUP BY l.video\_id

ORDER BY COUNT(\*) DESC LIMIT 10

WITH WeightOfUsers AS

(SELECT ly.user\_id, LOG(1+COUNT(\*)) AS weight FROM cats.like lx, cats.like ly

WHERE lx.user\_id=1 AND lx.video\_id=ly.video\_id GROUP BY ly.user\_id)

SELECT l.video\_id, SUM(w.weight) AS sum\_weight FROM cats.like l, WeightOfUsers w

WHERE l.user\_id=w.user\_id GROUP BY l.video\_id

ORDER BY sum\_weight DESC LIMIT 10