

METIS

Intro to SQL

Advanced Management

Subqueries



Question:

What accessories sell for less than the elephant tie?

```
SELECT name, sales_price FROM item_details
WHERE department = 'accessories'
AND sales_price <
    (SELECT sales_price FROM item_details
     WHERE name LIKE '%elephant%');
```



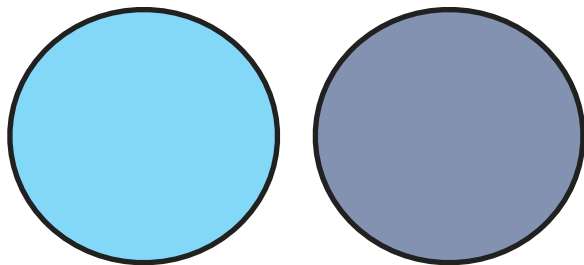
name	sales_price
peacock feather hat	34.9900
leopard-print scarf	14.4900
aardvark earrings	9.9900

Set Operations

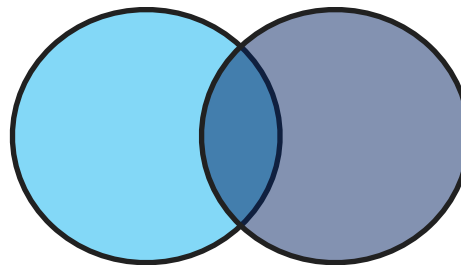


Set operators used to combined tables containing similar types of information

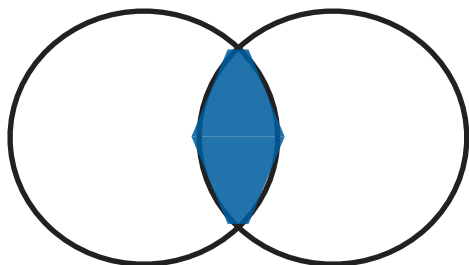
UNION ALL



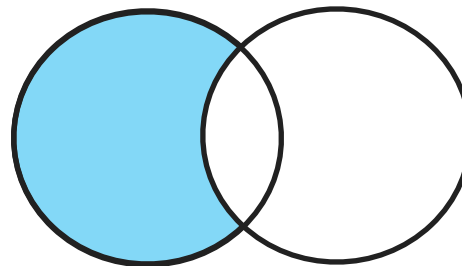
UNION



INTERSECT



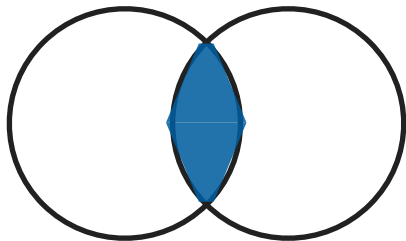
EXCEPT



Set Operations: INTERSECT



INTERSECT



```
SELECT id, name FROM inventory  
INTERSECT  
SELECT id, name FROM new_shipment;
```

id	name
12	manatee tank top
15	bow tie, ants marching

Math Functions



Question:

Using these lengths as the diameter, what are the circumference, area, and volume of the resulting circles/spheres?

```
SELECT item, length_inches,  
       PI()*length_inches AS circumference,  
       PI()*POWER((length_inches/2), 2) AS area,  
       4*PI()*POWER((length_inches/2), 3)/3 AS volume  
FROM measurements;
```

item	length_inches	circumference	area	volume
paperclip	1.375	4.31968989868597	1.4848934026733	1.36115228578386
pencil	7.5	23.5619449019234	44.1786466911065	220.893233455532
phone charger cord	42	131.946891450771	1385.4423602331	38792.3860865268

String Functions



Question:

Print off list of students results in the form of LAST NAME, FIRST NAME and PASS/FAIL

```
SELECT UPPER(last_name) + ', ' + UPPER(first_name) AS full_name,  
       CASE  
         WHEN test_grade >= 60 THEN 'PASS'  
         ELSE 'FAIL'  
       END AS test_result  
FROM students ORDER BY last_name;
```

full_name	test_result
BELL, TINKER	PASS
DARLING, WENDY	PASS
HOOK, CAPTAIN	FAIL
PAN, PETER	PASS
SMEE, MR.	FAIL

Date and Time Functions



Question:

How many days has it been since we last received a shipment for each item?

```
SELECT name, last_shipment  
       DAYDIFF(day, last_shipment  
              AS days_since_shipment  
FROM inventory  
ORDER BY days_since_shipment;
```

name	last_shipment	days_since_shipment
peacock feather hat	NULL	NULL
leopard-print scarf	NULL	NULL
manatee tank top	2018-03-19	3
bow tie, ants marching	2018-03-19	3
walrus-shaped pillow	2018-03-12	10
gazelle lamp	2018-03-12	10
bedding set, tiger icons	2018-03-12	10
wooly mammoth curtains	2018-03-12	10
giraffe-print bag	2018-02-26	24
elephant tie	2018-02-26	24
tiger t-shirt	2018-01-22	59
zebra-striped pants	2018-01-08	73