

SQL SINGLE TABLE QUERIES



1. Sales Representative

Sales Representative (i.e. Employee)

RepNum	LastName	FirstName	Street	City	State	Zip	Commission	Rate
20	Kaiser	Valerie	624 Randall	Grove	FL	33321	\$ 20,542.50	0.05
35	Hull	Richard	532 Jackson	Sheldon	FL	33553	\$ 39,216.00	0.07
65	Perez	Juan	1626 Taylor	Fillmore	FL	33336	\$ 23,487.00	0.05

Customer

CustomerNum	CustomerName	Street	City	State	Zip	Balance	Credit Limit	RepNum
148	Al's Appliance	2837 Greenway	Fillmore	FL	33336	\$ 6,550.00	\$ 7,500.00	20
282	Brookings Direct	3827 Devon	Grove	FL	33321	\$ 431.00	\$ 10,000.00	35
356	Ferguson's	382 Wildwood	Northfield	FL	33141	\$ 5,785.00	\$ 7,500.00	65
408	Everything Shop	1828 Raven	Crystal	FL	33503	\$ 5,285.24	\$ 5,000.00	35
502	Smith's Hardware	5505 Oak St.	Tampa	FL	33601	\$ 950.84	\$ 3,500.00	10

Write a query to answer the following:

List the names of the sales representatives whose commission is greater than \$30,000.
Then, write the output that would be obtained from this query.



1. Sales Representative -- Solution

Note: all the data you need to retrieve is recorded in the Sales Representative table. Therefore, this is a single-table query.

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List the names of the sales representatives whose commission is greater than \$30,000.

Select firstname, lastname

From Sales Representative

Where commission > 30,000;

Then, write the output that would be obtained from this query.

Richard Hull



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List the names of the sales representatives whose commission is greater than \$30,000.

Select firstname, lastname [State what you want to retrieve and in the order it will be displayed.]

From Sales Representative [Only table needed. All data is in this table.]

Where commission > 30,000; [Restriction is always after the where clause. Numeric, no quotes.]

Then, write the output that would be obtained from this query. [Manually from the table. Only one.]

Richard Hull



2. Park Example

Equipment: (E#, description)

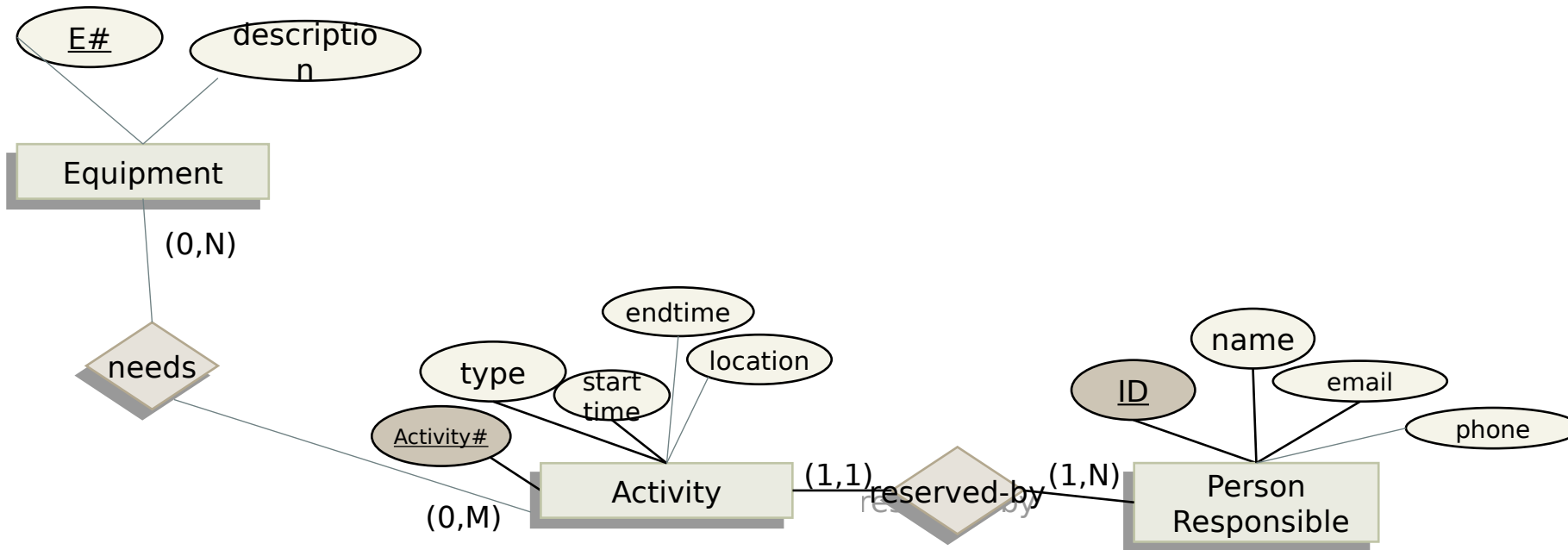
Activity: (Activity#, type, start-time, end-time, location, ID)

Person-Responsible: (ID, name, email, phone)

Equipment-Activity: (E#, Activity#)

Write a query for:

List the activities where the location has the phase *slide* in it.



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Equipment: (E#, description)

Activity: (Activity#, type, start-time, end-time, location, ID)

Person-Responsible: (ID, name, email, phone)

Equipment-Activity: (E#, Activity#)

Write a query for:

List the type of activities where the location has the phrase *slide* in it.

Select distinct type

From activity

Where location is like '%slide%';

[This is character string. Note the '%' both before and after the word '%.'
Could be select distinct type]



3. Museum Example

Recall the Museum example.

Work: (WorkID, type, title, width, weight, height, location, artist_ID, museumID)

Artist : (Artist_ID, name, dob, dod)

Museum: (MuseumID, address)

Write a query to retrieve the titles of the works where the height is greater than the width. This could tell someone how to hang the works.



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Work: (WorkID, type, title, width, weight, height, location, artist_ID, museumID)

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Museum: (MuseumID, address)

Write a query to retrieve the titles of the works where the height is greater than the width. This could tell someone how to hang the works. [Note: real-world purpose for such a query.]

Select title

From work

Where height > width;

Operation: (strictly) greater than sign.



4. Vehicle Rental

Reservation: (Res#, start-date, end-date, date-of-res, cust#)
Customer: (Cust#, type, name)
Vehicle: (Tag#, size, type, make)
Reserve-Vehicle: (Res#, Tag#)

Write an SQL query to answer the following:

Which reservations do not end on 29 February 2020?



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Reservation: (Res#, start-date, end-date, date-of-res, cust#)

Customer: (Cust#, type, name)

Vehicle: (Tag#, size, type, make)

Reserve-Vehicle: (Res#, Tag#)

Write an SQL query to answer the following:

What are the reservation numbers of the reservations do not end on 29 February 2020?

Select Res#

From Reservation

Where end-date <> '29 Feb 2020';

See the SQL Comparison Operations. This is not equal to. The date is alphanumeric so it requires single quotes.

