TASK 1 Create “employee” table.

1. CREATE Project 1 schema

SQL:

drop schema if exists project1;

create schema project1;

1. CREATE EMPLOYEE TABLE

SQL:

Use project1;

CREATE TABLE employee (

employee\_id INT NOT NULL AUTO\_INCREMENT,

employee\_name VARCHAR(64),

Employee\_title VARCHAR(64),

Employee\_dept VARCHAR(64),

full\_or\_part\_time CHAR(1),

salary\_or\_hourly VARCHAR(10),

typical\_hours DECIMAL(5 , 2 ),

annual\_salary DECIMAL(10 , 2 ),

hourly\_rate DECIMAL(5 , 2 ),

PRIMARY KEY (employee\_id)

);

1. Insert into Employee

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| employee\_name | employee\_title | employee\_dept | full\_or\_part\_time | salary\_or\_hourly | typical\_hours | annual\_salary | hourly\_rate |
| AARON, JEFFERY M | SERGEANT | POLICE | F | Salary |  | 111,444.00 |  |
| AARON, KARI | POLICE OFFICER (ASSIGNED AS DETECTIVE) | POLICE | F | Salary |  | 94,122.00 |  |
| AARON, KIMBERLEI R | CHIEF CONTRACT EXPEDITER | DAIS | F | Salary |  | 118,608.00 |  |
| ABAD JR, VICENTE M | CIVIL ENGINEER IV | WATER MGMNT | F | Salary |  | 117,072.00 |  |
| ABARCA, EMMANUEL | CONCRETE LABORER | TRANSPORTN | F | Hourly | 40 |  | 44.4 |
| ABARCA, FRANCES J | POLICE OFFICER | POLICE | F | Salary |  | 68,616.00 |  |
| ABASCAL, REECE E | TRAFFIC CONTROL AIDE-HOURLY | OEMC | P | Hourly | 20 |  | 19.86 |
| ABBATACOLA, ROBERT J | ELECTRICAL MECHANIC | AVIATION | F | Hourly | 40 |  | 50 |

Insert the following into the table – you can use an insert statement or the console.

SQL:

INSERT INTO employee

(employee\_id,

employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

typical\_hours,

annual\_salary,

hourly\_rate

)

VALUES

(null,'AARON,JEFFERY M','SERGEANT','POLICE','F','Salary',null,111444.00,null);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

annual\_salary

)

VALUES

('AARON,KARI','POLICE OFFICER (ASSIGNED AS DETECTIVE)','POLICE','F','Salary',94122.00);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

annual\_salary

)

VALUES

('AARON, KIMBERLEI R','CHIEF CONTRACT EXPEDITER','DAIS','F','Salary',118608.00);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

annual\_salary

)

Values

('ABAD JR, VICENTE M','CIVIL ENGINEER IV','WATER MGMNT','F','Salary',117072.00);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

typical\_hours,

hourly\_rate

)

Values

('ABARCA, EMMANUEL','CONCRETE LABORER','TRANSPORTN','F','Hourly',40,44.4);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

annual\_salary

)

Values

('ABARCA, FRANCES J','POLICE OFFICER','POLICE','F','Salary',68616.00);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

typical\_hours,

hourly\_rate

)

Values

('ABASCAL, REECE E','TRAFFIC CONTROL AIDE-HOURLY','OEMC','P','Hourly',20,19.86);

INSERT INTO employee

(employee\_name,

employee\_title,

employee\_dept,

full\_or\_part\_time,

salary\_or\_hourly,

typical\_hours,

hourly\_rate

)

Values

('ABBATACOLA, ROBERT J','ELECTRICAL MECHANIC','AVIATION','F','Hourly',40,50);

|  |
| --- |
|  |

1. Employee SQL Queries

Answer the following questions with a SQL statement – i.e. give me **a SQL query** that will answer the following. For example, if I ask you to select everyone in the Aviation department that is an hourly employee, I’d turn the following in.

select \* from employee

where employee\_dept = ‘AVIATION’ and salary\_or\_hourly = ‘Hourly’;



***Answer these Questions with SQL:***

1. Who is a salaried employee that makes less than 100k?
   1. SQL:

SELECT

\*

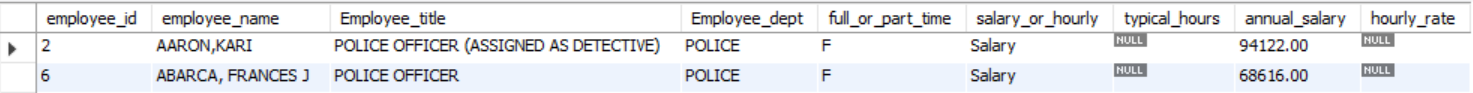
FROM

employee

WHERE

salary\_or\_hourly = 'Salary'

AND annual\_salary < 100000

* 1. Result:

1. Of the Hourly employees, multiply their typical hours by 50 weeks and hourly rate to create a new column ‘estimated\_annual\_salary’, order employees by this column from the largest to smallest
   1. SQL:

SELECT

\*,

(typical\_hours \* hourly\_rate \* 50) AS estimated\_annual\_salary

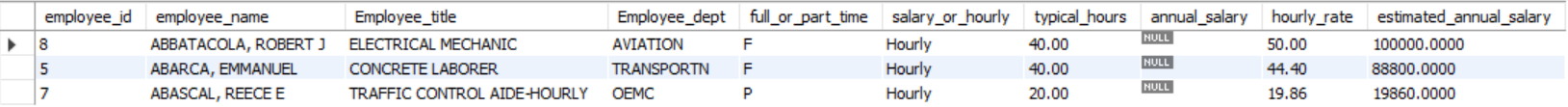
FROM

employee

WHERE

salary\_or\_hourly = 'Hourly'

ORDER BY estimated\_annual\_salary DESC;

* 1. Result:

1. Using the LIKE operator select anyone with a title that contains ‘OFF’
   1. SQL:

SELECT

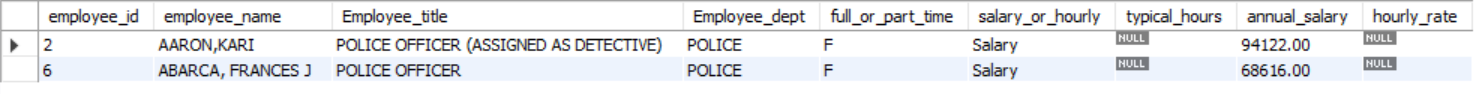
\*

FROM

employee

WHERE

Employee\_title LIKE '%OFF%';

* 1. Result:

Task 2 – Create NYC\_ApplicationS\_Prep table

Result 1

Create a table RES01 - Who are the Top 10 Sidewalk Seating Restaurants (by area) in Manhattan, provide the name, address, borough, sidewalk seating area and whether they serve alcohol or not.

SQL:

Drop table if exists Res01

CREATE TABLE Res01 (SELECT restaurant\_name,

business\_address,

borough,

sidewalk\_dimensions\_area,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

borough = 'Manhattan'

AND seating\_interest\_sidewalk = 'sidewalk'

ORDER BY sidewalk\_dimensions\_area DESC);

SELECT

\*

FROM

Res01

LIMIT 10;

Result:

A screenshot of a computer

Description automatically generated

Result 2

Create a table RES02 – Who are the Top 10 Brooklyn restaurants that serve alcohol by sidewalk seating area, provide the name, borough, address, sidewalk seating area and alcohol.

SQL:

Drop table if exists Res02

CREATE TABLE Res02 (SELECT restaurant\_name,

borough,

business\_address,

sidewalk\_dimensions\_area,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

borough = 'Brooklyn'

AND qualify\_alcohol = 'yes'

ORDER BY sidewalk\_dimensions\_area DESC);

SELECT

\*

FROM

Res02

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult:

Result 3

Create a table RES03 – Who are the Top 10 Restaurants by sidewalk seating area that serve alcohol and also contain the word ‘pizza’ (case-insensitive) in their name, provide the name, address, borough, sidewalk seating area and whether they serve alcohol or not.

SQL:

Drop table if exists Res03

CREATE TABLE Res03 (SELECT restaurant\_name,

business\_address,

borough,

sidewalk\_dimensions\_area,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

qualify\_alcohol = 'yes'

AND restaurant\_name like '%pizza%'

ORDER BY sidewalk\_dimensions\_area DESC);

SELECT

\*

FROM

Res03

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult:

Result 4

Create a table RES04 - Who are the Bottom 10 Brooklyn restaurants that serve alcohol order by sidewalk seating area above 0, provide the name, address, sidewalk seating area, borough and whether they serve alcohol or not.

SQL:

Drop table if exists Res04

CREATE TABLE Res04 (SELECT restaurant\_name,

business\_address,

sidewalk\_dimensions\_area,

borough,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

qualify\_alcohol = 'yes'

AND borough = 'Brooklyn'

AND sidewalk\_dimensions\_area > 0

ORDER BY sidewalk\_dimensions\_area ASC);

SELECT

\*

FROM

Res04

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult:

Result 5

Create table RES05- Who are the Bottom 10 Sidewalk Seating Restaurants (by sidewalk area above 0) in Queens, provide the name, address, sidewalk seating area, borough, and whether they serve alcohol or not.

SQL:

Drop table if exists Res05

CREATE TABLE Res05 (SELECT restaurant\_name,

business\_address,

sidewalk\_dimensions\_area,

borough,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

seating\_interest\_sidewalk = 'sidewalk'

AND borough = 'Queens'

AND sidewalk\_dimensions\_area > 0

ORDER BY sidewalk\_dimensions\_area ASC);

SELECT

\*

FROM

Res05

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult:

Result 6

Create table RES06 - Who are the Top 10 Restaurants by sidewalk seating area in Manhattan that serve alcohol and also start with the word ‘Thai’ (case-insensitive) in their name, provide the name, address, borough, sidewalk seating area and whether they serve alcohol or not.

SQL:

Drop table if exists Res06

CREATE TABLE Res06 (SELECT restaurant\_name,

business\_address,

borough,

sidewalk\_dimensions\_area,

qualify\_alcohol FROM

nyc\_applications\_prep

WHERE

restaurant\_name like 'Thai%'

AND borough = 'Manhattan'

AND qualify\_alcohol = 'yes'

ORDER BY sidewalk\_dimensions\_area DESC);

SELECT

\*

FROM

Res06

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult:

Result 7

Create table RES07 – Who are the Top 5 Restaurants by total\_outside\_area (sidewalk\_dimensions\_area + roadway\_dimensions\_area = total\_outside\_area), provide the name, address, sidewalk seating area, boro, roadway\_dimensions\_area, and whether they serve alcohol or not.

SQL:

Drop table if exists Res07

CREATE TABLE Res07 (SELECT restaurant\_name,

business\_address,

sidewalk\_dimensions\_area,

borough,

roadway\_dimensions\_area,

qualify\_alcohol,

(sidewalk\_dimensions\_area + roadway\_dimensions\_area) AS total\_outside\_area FROM

nyc\_applications\_prep

ORDER BY total\_outside\_area DESC);

SELECT restaurant\_name,

business\_address,

sidewalk\_dimensions\_area,

borough,

roadway\_dimensions\_area,

qualify\_alcohol

FROM

Res07

LIMIT 5;

A screenshot of a computer

Description automatically generatedResult:

Result 8

Create table RES08 – Who are Restaurants in Brooklyn that report ‘both’ in seating\_interest\_sidewalk, but either sidewalk seating area or largest roadway seating area is zero, provide the name, address, boro, sidewalk seating area, and roadway seating area, sort the results by sidewalk area in ascending order.

SQL:

Drop table if exists Res08

CREATE TABLE Res08 (SELECT restaurant\_name,

business\_address,

borough,

sidewalk\_dimensions\_area,

roadway\_dimensions\_area FROM

nyc\_applications\_prep

WHERE

seating\_interest\_sidewalk = 'both'

AND borough = 'Brooklyn'

ORDER BY sidewalk\_dimensions\_area ASC);

SELECT

\*

FROM

Res08

WHERE

sidewalk\_dimensions\_area = 0

OR roadway\_dimensions\_area = 0

ORDER BY sidewalk\_dimensions\_area ASC

LIMIT 10;

A screenshot of a computer

Description automatically generatedResult: