Homework 03 - Part I

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Introduction

Create a database from data modeling to SQL realization.

Problem

> **Question 3.3** One of your (hipster) acquaintances thinks he has the next billion-dollar start-up idea for an app: Pizza Delivery with Entertainment. He heard from other people that you are following the course on database management, and asks you to design the EER model. Afterwards, he will use the EER model to ask programmers to implement the app.
>
> He explains the basic functionality of the app as follows: customers can order pizzas from restaurants to get delivered to a specific address, and if they want to, they can choose a special "entertainment order." The following is a detailed explanation of the range of capabilities of the app.
>
> When people create an account for the app and become app users, they have to indicate their birthday and fill in their name and address. Every user should also be uniquely identifiable.
>
> Once the account is created, the users should be presented with three options.
>
> The first option in the app is to select "business owner." We also ask these business owners to provide their LinkedIn account so we can add them to our professional network. Each business owner can own a number of pizza restaurants. Of these pizza restaurants, we want to register the zip code, address, phone number, website, and the opening hours.
>
> Each pizza restaurant can offer a number of pizzas. Of those pizzas, we want to keep the name (e.g., margherita, quattro stagioni), the crust structure (for example, classic Italian crust, deep dish crust, cheese crust), and the price. While two pizzas from different pizza restaurants may have the same name, they will not be exactly the same, as the taste will be different, and thus should be considered unique. Moreover, pizzas should be distinguishable even if they have the same price, e.g., a pizza margherita from Pizza Pronto in New York that costs €12 must be distinguishable from a pizza margherita from Pizza Rapido in Singapore, which also costs €12.
>
> The second option in the app is to select "hungry customer." Of those hungry customers, we need a delivery address. Hungry customers can make orders for pizzas. Each order gets assigned an ID, and we want our app to log the date and time when the order was placed. We also allow the hungry customer to indicate the latest time of delivery, and ask how many people the order is for. An order can be for one or more pizzas.
>
> A special type of order can be made: the entertainment order. When an order is an entertainment order, the delivery person stays with the customer after delivering the pizza and entertains the customers (e.g., singing, making jokes, doing magic tricks) for a certain amount of time. When a hungry customer indicates that he or she wants to be entertained

while eating the pizza, we not only want to register all the regular order information, but also the type of entertainment the user requests, and for how long (a duration).

The third option in the app is that of “entertainer.” When users select entertainer, they need to provide a stage name, write a short bio about themselves, and indicate their price per 30 minutes. Every entertainment order is fulfilled by exactly one entertainer. Every entertainer can choose for which pizza restaurant(s) he or she wants to work. For each pizza restaurant an entertainer wants to work with, he or she should indicate his or her availability by day (Monday, Tuesday, Wednesday, etc.).

Make an EER model to model the data requirements.

Suggested EER Diagram follows. Please do not attempt to convert this EER diagram item by item to the Oracle Datamodeler. Use it to extract business required entity sets, business rules, relationships and types of relationships.

In other words, your solution is not a translation of this EER diagram.

Solution

a, d, f

> (a) Review the problem 3.1 statement and the textbook author's EER diagram. Read the textbook to understand the authors EER diagram and extract suggested entities, relationships, and business rules. Most importantly extract every business rule to be included in your own database conceptual design for which you will use the Oracle Datamodeler.
>
> (d) Identify and list the entity sets.
>
> (f) Identify and list the business rules associate with each entity set.

Entity:

- app user
- business owner
- hungry customer
- entertainer
- restaurant
- pizza
- order
- entertainment order

Relationship:

- Business owner, hungry customer, and entertainer are **belong** to app user, which means they are subclasses.
- Each business owner **owns** 1+ restaurants.
- Each restaurant **provides** 1+ kinds of pizza.
- Each hungry customer **places** 1+ orders,
- Each orders **is** an entertainment order.
- Each entertainer **works for** 1+ restaurants and **fulfills** 1+ entertainment order.

Business Rule:

- App user is **one of** business owner, hungry customer or entertainer.
- Each business owner owns **1+** restaurants.
- Each pizza restaurant offers **1+** pizzas.
- Each pizza in each restaurant is **unique**.
- Each order is placed by **1** hungry customer.
- Each customer places **1+** orders.
- Each order contains **1+** of entertaining type.
- Each entertainment order is fulfilled by **1** entertainer
- Each entertainer **works for** 1+ restaurants and **fulfills** 1+ entertainment order.

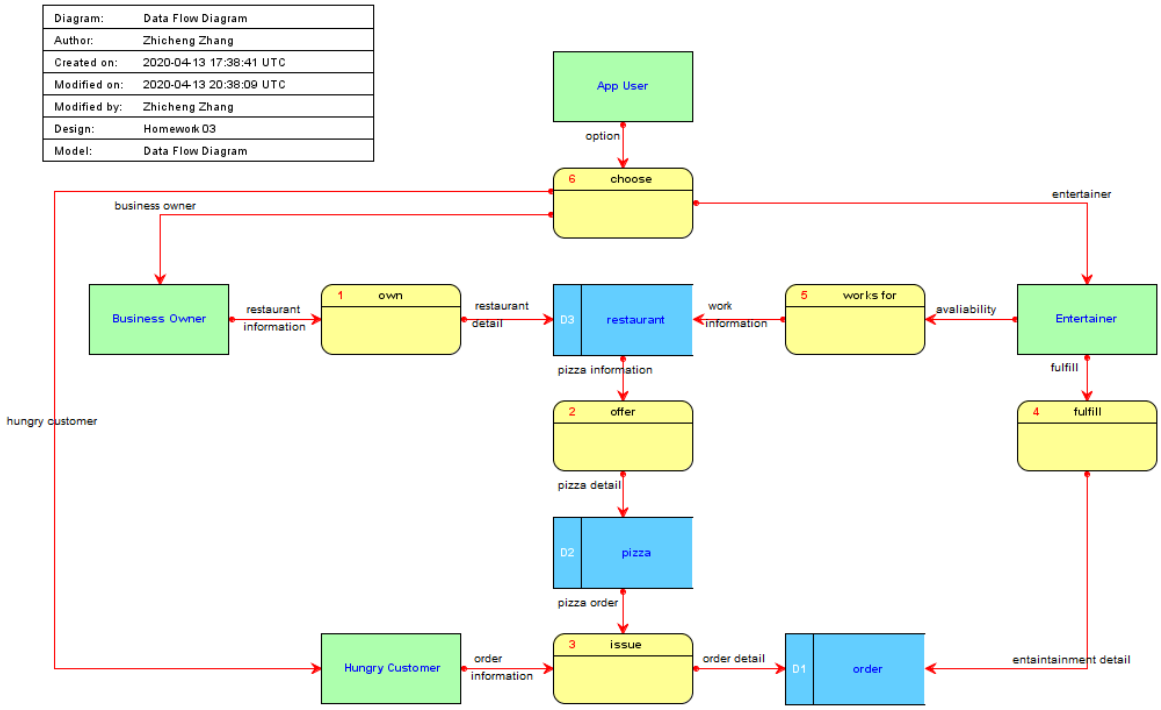
b

> (b) Describe the organization and the purpose of the database to be designed.

This database is used to deal with the pizza order which placed by hungry customer made by restaurant.

c

> (c) Using the Oracle Datamodeler, build a dataflow diagram for the "Pizza Sales Report System".



e, h

> (e) Identify the list of attributes and the ID for each entity set (this will be the possible natural key).
>
> (h) For each entity set identify a surrogate key or artificial key, if need it. This will be the Primary Key on the relational diagram and the ID identified as the NATURAL KEY. Both, the Primary key and the natural key need to be given the UNIQUE and NOT NULL constraints. These are the basic properties of the Primary and candidate Key.

APP_USER:

- ID
- NAME
- DATE_OF_BIRTH
- SEX

BUSINESS_OWNER:

- ID
- WEBSITE

HUNGRY_CUSTOMER:

- ID
- DELIVERY_DETAIL_ADDRESS
- DELIVERY_ZIP_CODE

ENTERTAINER:

- ID
- STAGE_NAME
- SHORT_BIO

- PROCE

RESTAURANT:

- ID
- NAME
- ZIP_CODE
- DETAILED_ADDRESS
- HOURS
- PHONE
- WEBSITE

PIZZA:

- ID
- NAME
- CRUST_STRUCTURE
- PRICE

PIZZA_ORDER:

- ID
- PLACEMENT_DATETIME
- LATEST_DELIVERY_DATETIME
- PEOPLE_NUMBER

ENTERTAINMENT_ORDER:

- ID
- TYPE
- DURATION

g

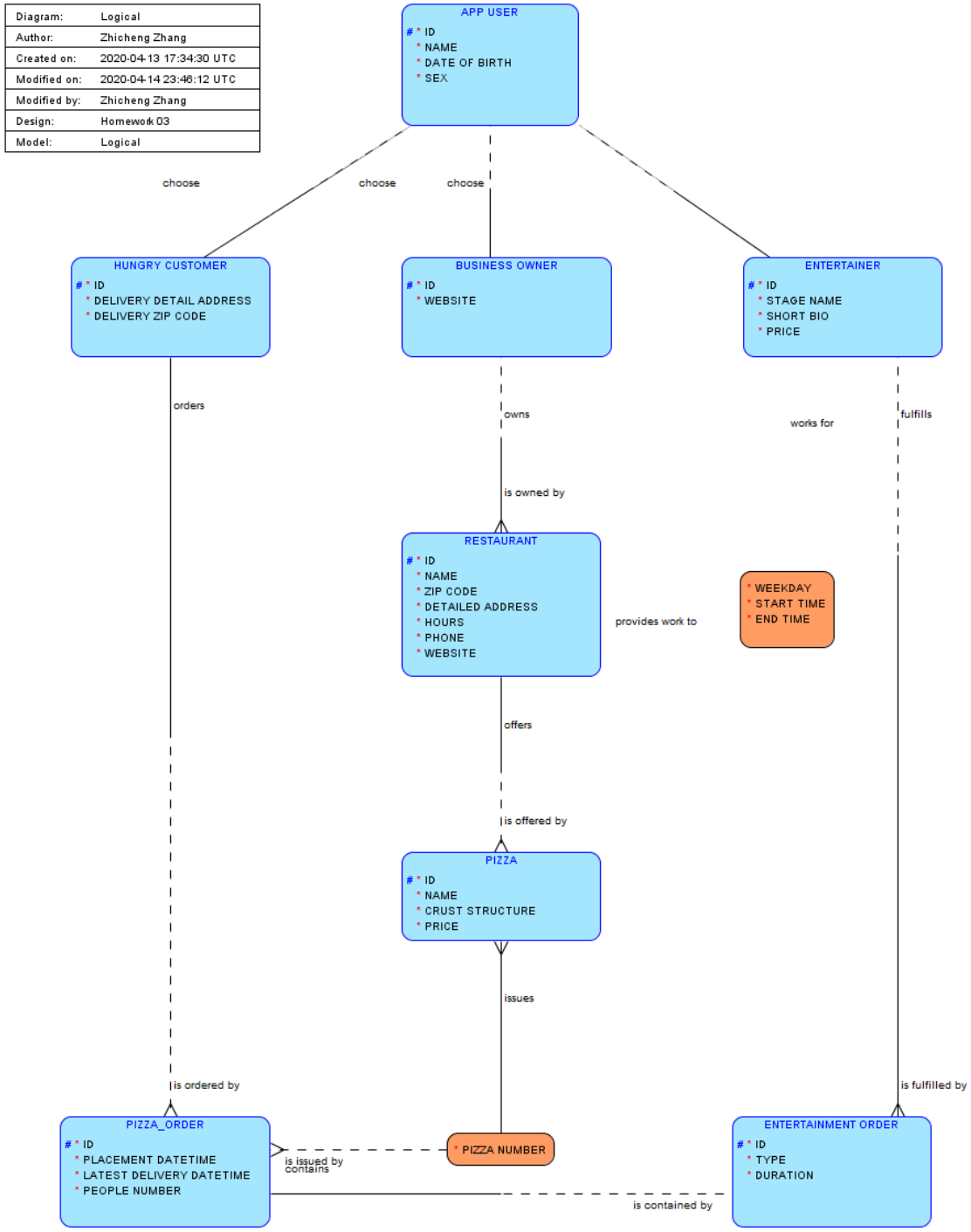
> (g) Identify and list the relationships among the entity sets and indicate if they are one-to-one, one-to-many, or many-to-many relationships.

Entity	Relationship	Entity
business Owner	1 vs. 1+	restaurant
restaurant	1 vs. 1+	pizza
hungry customer	1 vs. 1+	order
order	1 vs. 1+	pizza
order	1 vs. 1	entertainment order
entertainer	1+ vs. 1+	restaurant
entertainer	1 vs 1+	entertainment

Business owner, hungry customer and entertainer must be an app user (1 vs. 1).

i

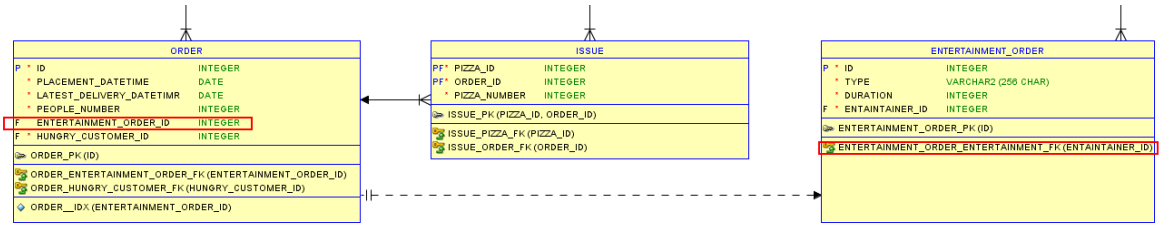
> (i) Using the Oracle Datamodeler build the EER diagram (database conceptual design). All business rules identified above must be entered into the Oracle Data Modeler.



j

> (j) Proceed to convert the EER diagram into a Relational Diagram. Make sure all the constraints, naming convention, etc. have been followed in your Data Model.

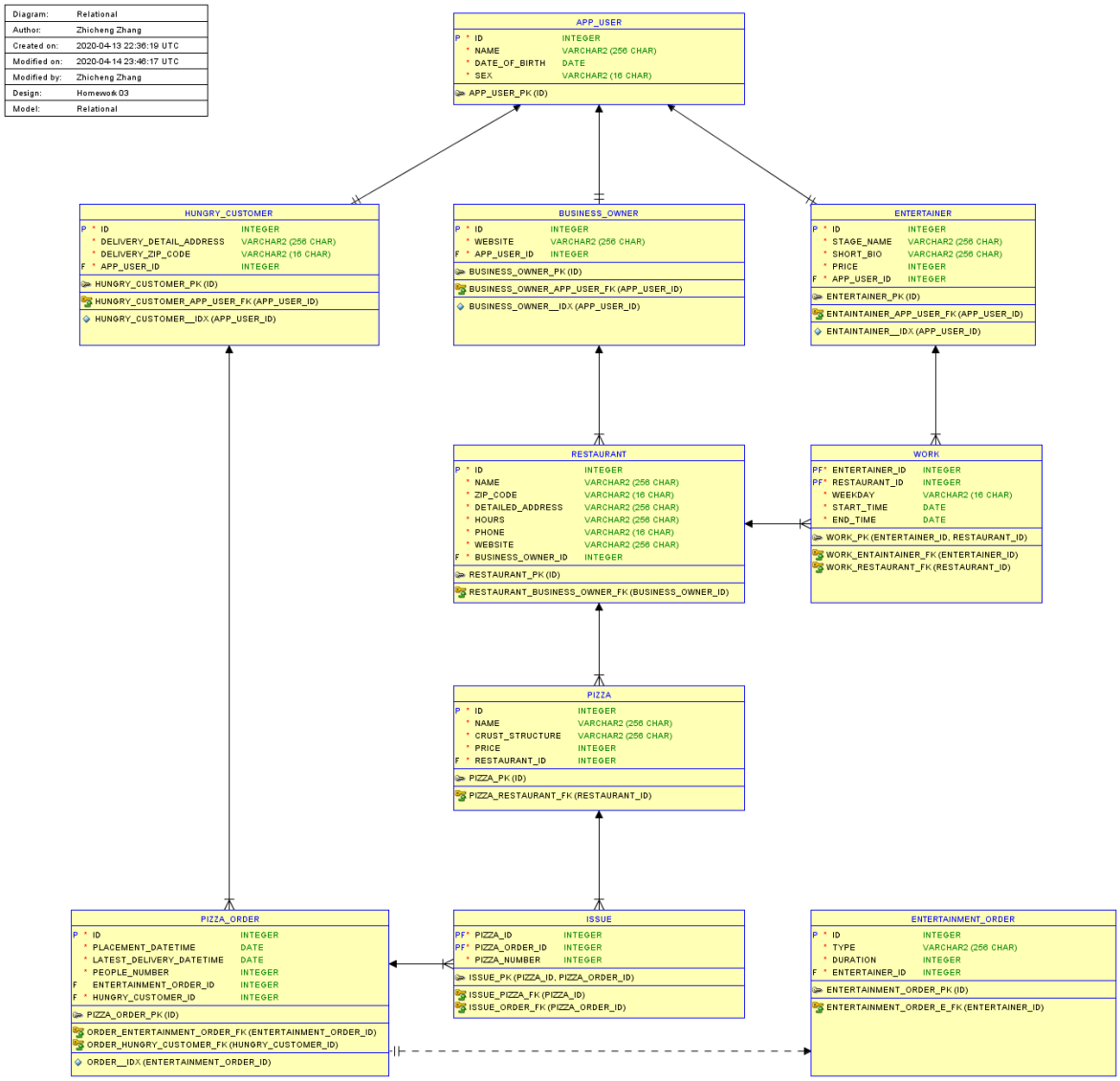
There are 2 bugs when first generating the relational data model.



1. The foreign key `ENTERTAINMENT_ORDER_DETAIL` is generated as mandatory. Based on the EER diagram, it should be optional.
2. The foreign key `ENTERTAINMENT_ORDER_ENTERTAINMENT_FK` is too long, which will cause the following error when generating the DDL.

```
--  ERROR: FK name length exceeds maximum allowed length(30)
ALTER TABLE entertainment_order
    ADD CONSTRAINT entertainment_order_entaintainer_fk FOREIGN KEY (
entaintainer_id )
        REFERENCES entaintainer ( id );
```

After Fixing aforementioned bugs, the relational diagram will be:



k, l

> (k) Review the Relational diagram and identify missing item or corrections that are needed in the data model. For example, missing entities, relationships, missing constraints, etc. If corrections are needed, make the corrections on the EER diagram and re-generate the relational diagram.
>
> (l) Once you have finalized the EER diagram, proceed to generate the DDL.

The DDL file is generated as following:

```
-- Generated by Oracle SQL Developer Data Modeler 19.4.0.350.1424
--   at:        2020-04-14 18:34:05 EDT
--   site:      Oracle Database 11g
--   type:      Oracle Database 11g

CREATE TABLE app_user (
    id             INTEGER NOT NULL,
    name           VARCHAR2(256 CHAR) NOT NULL,
    date_of_birth  DATE NOT NULL,
    sex            VARCHAR2(16 CHAR) NOT NULL
);

ALTER TABLE app_user ADD CONSTRAINT app_user_pk PRIMARY KEY ( id );

CREATE TABLE business_owner (
    id           INTEGER NOT NULL,
    website      VARCHAR2(256 CHAR) NOT NULL,
    app_user_id  INTEGER NOT NULL
);

CREATE UNIQUE INDEX business_owner__idx ON
    business_owner (
        app_user_id
    ASC );

ALTER TABLE business_owner ADD CONSTRAINT business_owner_pk PRIMARY KEY ( id );

CREATE TABLE entertainer (
    id           INTEGER NOT NULL,
    stage_name   VARCHAR2(256 CHAR) NOT NULL,
    short_bio    VARCHAR2(256 CHAR) NOT NULL,
    price        INTEGER NOT NULL,
    app_user_id  INTEGER NOT NULL
);

CREATE UNIQUE INDEX entaintainer__idx ON
    entertainer (
        app_user_id
    ASC );

ALTER TABLE entertainer ADD CONSTRAINT entertainer_pk PRIMARY KEY ( id );

CREATE TABLE entertainment_order (
    id              INTEGER NOT NULL,
    type            VARCHAR2(256 CHAR) NOT NULL,
    duration        INTEGER NOT NULL,
```

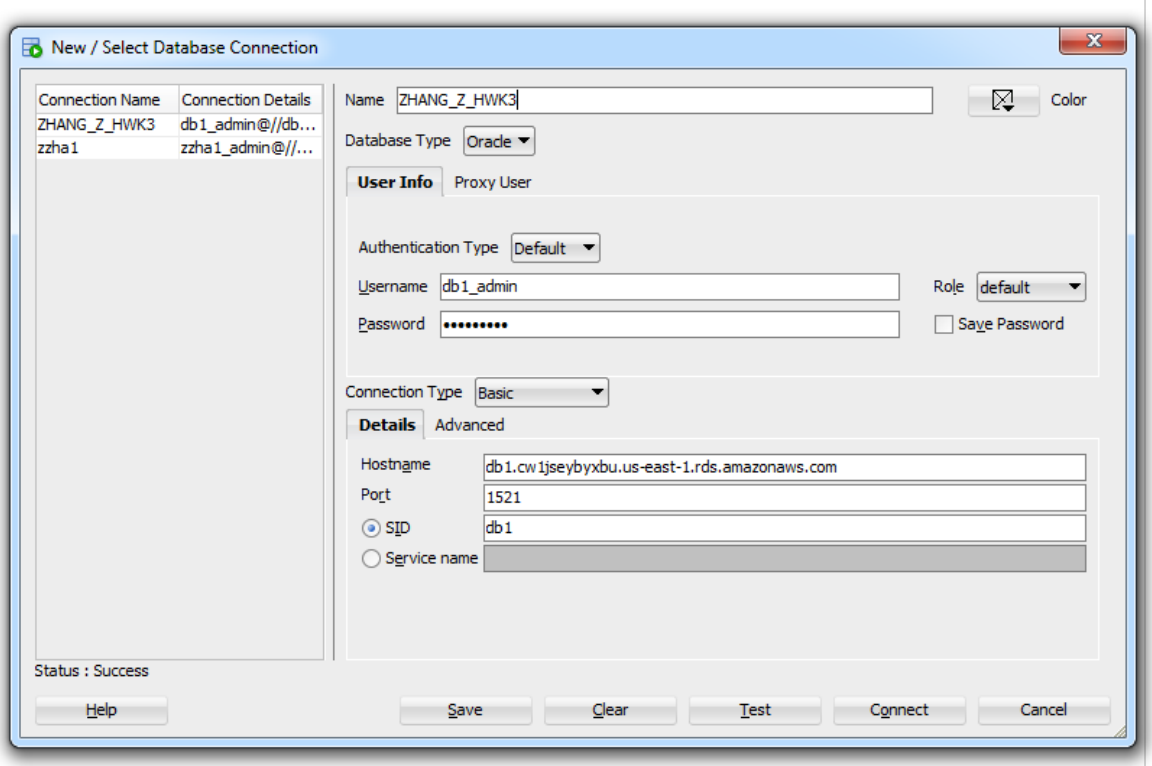
```
    entertainer_id  INTEGER NOT NULL
);

ALTER TABLE entertainment_order ADD CONSTRAINT entertainment_order_pk PRIMARY
KEY ( id );

CREATE TABLE hungry_customer (
    id                      INTEGER NOT NULL,
    delivery_detail_address  VARCHAR2(256 CHAR) NOT NULL,
    delivery_zip_code        VARCHAR2(16 CHAR) NOT NULL,
    app_user_id              INTEGER NOT NULL
);

CREATE UNIQUE INDEX hungry_customer__idx ON
    hungry_customer (
        app_user_id
    ASC );

ALTER TABLE hungry_customer ADD CONSTRAINT hungry_customer_pk PRIMARY KEY ( id
);

CREATE TABLE issue (
    pizza_id        INTEGER NOT NULL,
    pizza_order_id  INTEGER NOT NULL,
    pizza_number    INTEGER NOT NULL
);

ALTER TABLE issue ADD CONSTRAINT issue_pk PRIMARY KEY ( pizza_id,
                                                        pizza_order_id );

CREATE TABLE pizza (
    id               INTEGER NOT NULL,
    name             VARCHAR2(256 CHAR) NOT NULL,
    crust_structure  VARCHAR2(256 CHAR) NOT NULL,
    price            INTEGER NOT NULL,
    restaurant_id    INTEGER NOT NULL
);

ALTER TABLE pizza ADD CONSTRAINT pizza_pk PRIMARY KEY ( id );

CREATE TABLE pizza_order (
    id                        INTEGER NOT NULL,
    placement_datetime        DATE NOT NULL,
    latest_delivery_datetime  DATE NOT NULL,
    people_number             INTEGER NOT NULL,
    entertainment_order_id    INTEGER,
    hungry_customer_id        INTEGER NOT NULL
);

CREATE UNIQUE INDEX order__idx ON
    pizza_order (
        entertainment_order_id
    ASC );

ALTER TABLE pizza_order ADD CONSTRAINT pizza_order_pk PRIMARY KEY ( id );

CREATE TABLE restaurant (
    id                  INTEGER NOT NULL,
```

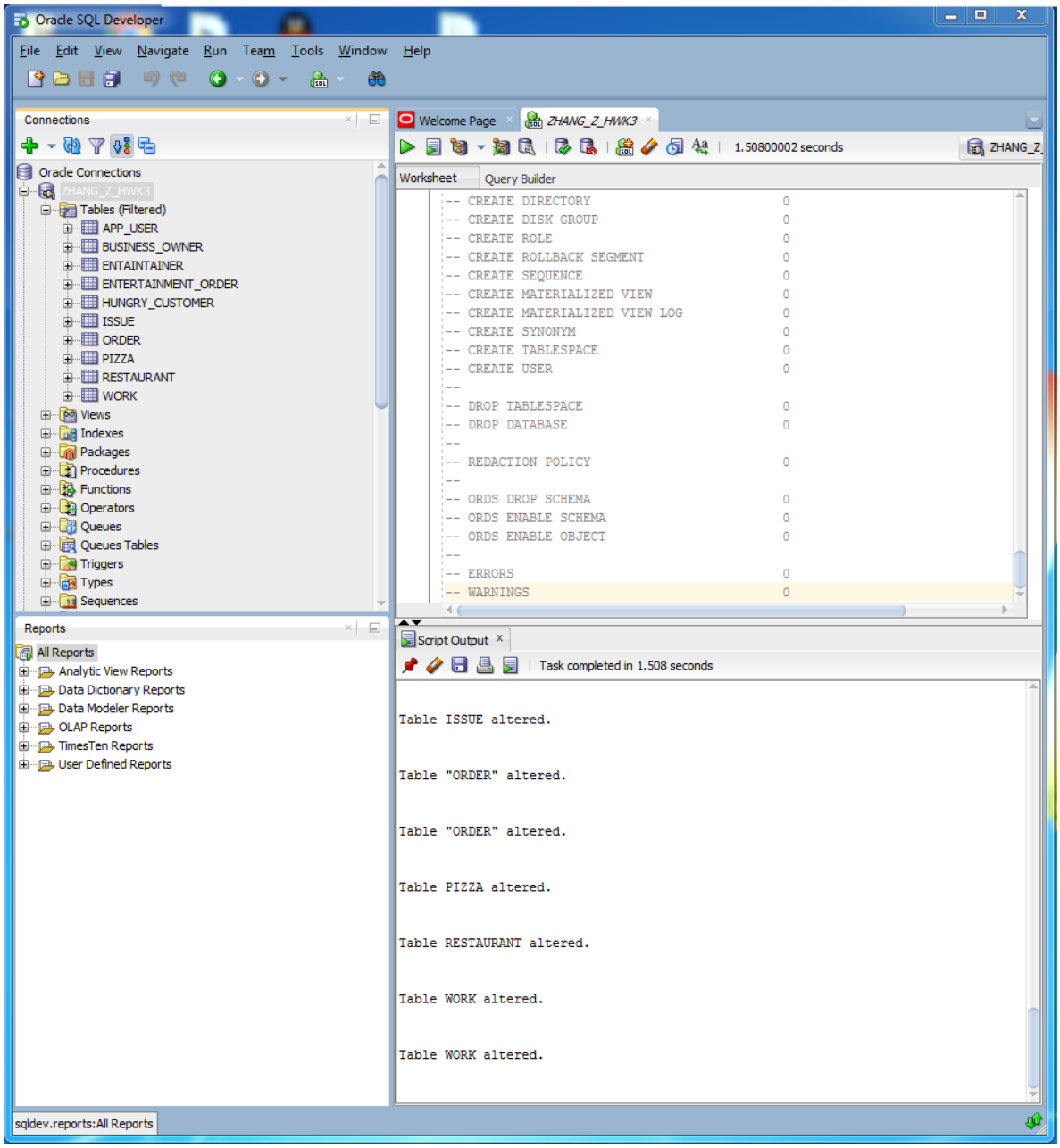
```
    name               VARCHAR2(256 CHAR) NOT NULL,
    zip_code           VARCHAR2(16 CHAR) NOT NULL,
    detailed_address   VARCHAR2(256 CHAR) NOT NULL,
    hours              VARCHAR2(256 CHAR) NOT NULL,
    phone              VARCHAR2(16 CHAR) NOT NULL,
    website            VARCHAR2(256 CHAR) NOT NULL,
    business_owner_id  INTEGER NOT NULL
);

ALTER TABLE restaurant ADD CONSTRAINT restaurant_pk PRIMARY KEY ( id );

CREATE TABLE work (
    entaintainer_id  INTEGER NOT NULL,
    restaurant_id    INTEGER NOT NULL,
    weekday          VARCHAR2(16 CHAR) NOT NULL,
    start_time       DATE NOT NULL,
    end_time         DATE NOT NULL
);

ALTER TABLE work ADD CONSTRAINT work_pk PRIMARY KEY ( entaintainer_id,
                                                     restaurant_id );

ALTER TABLE business_owner
    ADD CONSTRAINT business_owner_app_user_fk FOREIGN KEY ( app_user_id )
        REFERENCES app_user ( id );

ALTER TABLE entertainer
    ADD CONSTRAINT entaintainer_app_user_fk FOREIGN KEY ( app_user_id )
        REFERENCES app_user ( id );

ALTER TABLE entertainment_order
    ADD CONSTRAINT entertainment_order_e_fk FOREIGN KEY ( entertainer_id )
        REFERENCES entertainer ( id );

ALTER TABLE hungry_customer
    ADD CONSTRAINT hungry_customer_app_user_fk FOREIGN KEY ( app_user_id )
        REFERENCES app_user ( id );

ALTER TABLE issue
    ADD CONSTRAINT issue_order_fk FOREIGN KEY ( pizza_order_id )
        REFERENCES pizza_order ( id );

ALTER TABLE issue
    ADD CONSTRAINT issue_pizza_fk FOREIGN KEY ( pizza_id )
        REFERENCES pizza ( id );

ALTER TABLE pizza_order
    ADD CONSTRAINT order_entertainment_order_fk FOREIGN KEY (
entertainment_order_id )
        REFERENCES entertainment_order ( id );

ALTER TABLE pizza_order
    ADD CONSTRAINT order_hungry_customer_fk FOREIGN KEY ( hungry_customer_id )
        REFERENCES hungry_customer ( id );

ALTER TABLE pizza
    ADD CONSTRAINT pizza_restaurant_fk FOREIGN KEY ( restaurant_id )
        REFERENCES restaurant ( id );
```

```
ALTER TABLE restaurant
    ADD CONSTRAINT restaurant_business_owner_fk FOREIGN KEY ( business_owner_id
)
        REFERENCES business_owner ( id );

ALTER TABLE work
    ADD CONSTRAINT work_entaintainer_fk FOREIGN KEY ( entaintainer_id )
        REFERENCES entertainer ( id );

ALTER TABLE work
    ADD CONSTRAINT work_restaurant_fk FOREIGN KEY ( restaurant_id )
        REFERENCES restaurant ( id );

-- Oracle SQL Developer Data Modeler Summary Report:
--
-- CREATE TABLE                            10
-- CREATE INDEX                             4
-- ALTER TABLE                             22
-- CREATE VIEW                              0
-- ALTER VIEW                               0
-- CREATE PACKAGE                           0
-- CREATE PACKAGE BODY                      0
-- CREATE PROCEDURE                         0
-- CREATE FUNCTION                          0
-- CREATE TRIGGER                           0
-- ALTER TRIGGER                            0
-- CREATE COLLECTION TYPE                   0
-- CREATE STRUCTURED TYPE                   0
-- CREATE STRUCTURED TYPE BODY              0
-- CREATE CLUSTER                           0
-- CREATE CONTEXT                           0
-- CREATE DATABASE                          0
-- CREATE DIMENSION                         0
-- CREATE DIRECTORY                         0
-- CREATE DISK GROUP                        0
-- CREATE ROLE                              0
-- CREATE ROLLBACK SEGMENT                  0
-- CREATE SEQUENCE                          0
-- CREATE MATERIALIZED VIEW                 0
-- CREATE MATERIALIZED VIEW LOG             0
-- CREATE SYNONYM                           0
-- CREATE TABLESPACE                        0
-- CREATE USER                              0
--
-- DROP TABLESPACE                          0
-- DROP DATABASE                            0
--
-- REDACTION POLICY                         0
--
-- ORDS DROP SCHEMA                         0
-- ORDS ENABLE SCHEMA                       0
-- ORDS ENABLE OBJECT                       0
--
-- ERRORS                                   0
-- WARNINGS                                 0
```

m, n, o

> (m) Create a script similar the sample database schema “Create_HR_Database_Schema.sql” to create the database schema for this assignment using the DDL created in the above step. This may require making updates in the Oracle Datamodeler to make sure all the needed REFERENTIAL INTEGRITY CONSTRAINTS are created (e.g. Primary Keys, UNIQUE Keys, Referential Integrity, NULL, NOT NULL, DEFAULT).
>
> (n) Using the Oracle SQL Developer, create an Oracle database userid “<last-Name>_<first character of First name>_HWK2” in the Oracle database “db1”. For example: **fernandez_rolando_HWK2**.
>
> (o) Run the script that creates the database schema into your userid created above.




Oracle SQL Developer
File Edit View Navigate Run Team Tools Window Help
Connections
Oracle Connections
ZHANG_Z_HWK3
Tables (Filtered)
APP_USER
BUSINESS_OWNER
ENTAINTAINER
ENTERTAINMENT_ORDER
HUNGRY_CUSTOMER
ISSUE
ORDER
PIZZA
RESTAURANT
WORK
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
Welcome Page
ZHANG_Z_HWK3
1.50800002 seconds
ZHANG_Z
Worksheet
Query Builder
-- CREATE DIRECTORY 0
-- CREATE DISK GROUP 0
-- CREATE ROLE 0
-- CREATE ROLLBACK SEGMENT 0
-- CREATE SEQUENCE 0
-- CREATE MATERIALIZED VIEW 0
-- CREATE MATERIALIZED VIEW LOG 0
-- CREATE SYNONYM 0
-- CREATE TABLESPACE 0
-- CREATE USER 0
--
-- DROP TABLESPACE 0
-- DROP DATABASE 0
--
-- REDACTION POLICY 0
--
-- ORDS DROP SCHEMA 0
-- ORDS ENABLE SCHEMA 0
-- ORDS ENABLE OBJECT 0
--
-- ERRORS 0
-- WARNINGS 0
Script Output
Task completed in 1.508 seconds
Table ISSUE altered.
Table "ORDER" altered.
Table "ORDER" altered.
Table PIZZA altered.
Table RESTAURANT altered.
Table WORK altered.
Table WORK altered.
sqldev.reports:All Reports

p

> (p) Create INSERT statement to insert at least 8 rows in each table. Make sure that you need to load the parent tables first to avoid errors.

Script:

```
-- APP_USER

INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('1',
'Albert V. Mulkey', TO_DATE('1959-06-05 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('2',
'Vanessa W. Hamilton', TO_DATE('1990-02-21 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('3',
'Alfonso M. Dillard', TO_DATE('1935-08-19 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('4',
'Cheryl R. Bono', TO_DATE('1996-11-06 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('5',
'Diane F. Anderson', TO_DATE('1990-09-25 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('6',
'Charles M. Hay', TO_DATE('1961-08-02 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('7',
'Anne B. Bruner', TO_DATE('1997-10-12 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('8',
'Timothy B. Hinson', TO_DATE('1936-05-06 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('9',
'Clarence M. Fleet', TO_DATE('1996-08-05 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('10',
'Frank S. Richardson', TO_DATE('1969-04-04 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('11',
'Nell D. James', TO_DATE('1942-07-15 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('12',
'Diego M. Eastman', TO_DATE('1967-03-10 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('13',
'Timothy B. Wilkin', TO_DATE('1937-10-18 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('14',
'Tracy A. Lewis', TO_DATE('1976-05-01', 'YYYY-MM-DD HH24:MI:SS'), 'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('15',
'Michael M. Elliott', TO_DATE('1961-06-24 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('16',
'Dortha D. Travers', TO_DATE('1968-07-16 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
```

```
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('17',
'Carl M. Smith', TO_DATE('1978-02-23 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('18',
'Ronnie H. Matheny', TO_DATE('1969-10-09 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('19',
'Elizabeth W. Truong', TO_DATE('1987-11-02 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('20',
'Horace H. Fugate', TO_DATE('1958-08-14 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('21',
'Christopher G. Williford', TO_DATE('1991-12-23 00:00:00', 'YYYY-MM-DD
HH24:MI:SS'), 'male');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('22',
'Cora B. Anderson', TO_DATE('1966-06-30 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('23',
'Kathryn C. Stewart', TO_DATE('1976-12-19 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'female');
INSERT INTO "DB1_ADMIN"."APP_USER" (ID, NAME, DATE_OF_BIRTH, SEX) VALUES ('24',
'Randal I. Ratliff', TO_DATE('1992-11-14 00:00:00', 'YYYY-MM-DD HH24:MI:SS'),
'male');

-- BUSINESS_OWNER

INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('1',
'bosanioculo.com', '1');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('2',
'treathan.com', '6');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('3',
'productosdelrio.com', '10');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('4',
'pilladelblog.com', '12');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('5',
'barsideboard.com', '18');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('6',
'echollo.com', '20');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('7',
'rhtcpch.com', '22');
INSERT INTO "DB1_ADMIN"."BUSINESS_OWNER" (ID, WEBSITE, APP_USER_ID) VALUES ('8',
'ajag.com', '23');

-- ENTERTAINER

INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('1', 'Griffin Montoya', 'I''m Griffin Montoya.', '1200',
'2');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('2', 'Joel Bean', 'I''m Joel Bean.', '1700', '4');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('3', 'Edith Downs', 'I''m Edith Downs.', '2000', '5');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('4', 'Keegan Camacho', 'I''m Keegan Camacho.', '1500',
'9');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('5', 'Indi Kirk', 'I''m Indi Kirk.', '1600', '14');
```

```
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('6', 'Moshe Beach', 'I''m Moshe Beach.', '1800', '19');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('7', 'Daryl Matthews', 'I''m Daryl Matthews.', '1100',
'21');
INSERT INTO "DB1_ADMIN"."ENTERTAINER" (ID, STAGE_NAME, SHORT_BIO, PRICE,
APP_USER_ID) VALUES ('8', 'Millie Mclaughlin', 'I''m Millie Mclaughlin.',
'1300', '24');

-- HUNGRY_CUSTOMER

INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('1', '2930 Custer Street', '16510',
'3');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('2', '675 Indiana Avenue', '96819',
'7');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('3', '1053 Bassel Street', '70357',
'8');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('4', '2077 New York Avenue', '76110',
'11');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('5', '4159 Cunningham Court', '48226',
'13');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('6', '2998 Highland View Drive',
'95814', '15');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('7', '161 Roosevelt Street', '94949',
'16');
INSERT INTO "DB1_ADMIN"."HUNGRY_CUSTOMER" (ID, DELIVERY_DETAIL_ADDRESS,
DELIVERY_ZIP_CODE, APP_USER_ID) VALUES ('8', '2869 George Avenue', '36608',
'17');

-- RESTAURANT

INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('1', 'Duccini''s Pizza',
'20009', '1778 U St NW, Washington', '6PM-2AM', '(202) 484-8484',
'duccinis.com', '1');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('2', 'Pizzeria Paradiso',
'20007', '3282 M St NW', '12:30PM-9PM', '(202) 337-1245', 'eatyourpizza.com',
'1');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('3', 'DC Pizza', '20036',
'1103 19th St NW', '11:30AM-8PM', '(202) 331-1800', 'dcpizzaonline.com', '2');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('4', 'Pi Pizzeria', '20004',
'910 F St NW', '11AM-11PM', '(202) 393-5484', 'places.singleplatform.com', '2');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('5', 'We, The Pizza', '20003',
'305 Pennsylvania Ave. SE', '11AM-9:30PM', '(202) 544-4008', 'wethepizza.com',
'3');
```

```
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('6', 'Wiseguy Pizza', '20001',
'300 Massachusetts Ave NW #1', '11AM-8:30PM', '(202) 408-7800',
'wiseguypizza.com', '3');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('7', 'Pizzeria Paradiso',
'20036', '2003 P St NW', '1PM-9PM', '(202) 223-1245', 'eatyourpizza.com', '4');
INSERT INTO "DB1_ADMIN"."RESTAURANT" (ID, NAME, ZIP_CODE, DETAILED_ADDRESS,
HOURS, PHONE, WEBSITE, BUSINESS_OWNER_ID) VALUES ('8', 'All-Purpose Shaw',
'20001', '1250 9th St NW', '11AM-8:30PM', '(202) 849-6174', 'allpurposedc.com',
'4');

-- WORK

INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('1', '1', 'Monday-Sunday', TO_DATE('1970-01-01
18:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 02:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('8', '1', 'Monday-Sunday', TO_DATE('1970-01-01
18:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 02:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('2', '2', 'Monday-Sunday', TO_DATE('1970-01-01
12:30:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('7', '2', 'Monday-Sunday', TO_DATE('1970-01-01
12:30:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('3', '3', 'Monday-Sunday', TO_DATE('1970-01-01
11:30:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('6', '3', 'Monday-Sunday', TO_DATE('1970-01-01
11:30:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('4', '4', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 23:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('5', '4', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 23:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('5', '5', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:30:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('4', '5', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:30:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('6', '6', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:30:00', 'YYYY-MM-DD
HH24:MI:SS'));
```

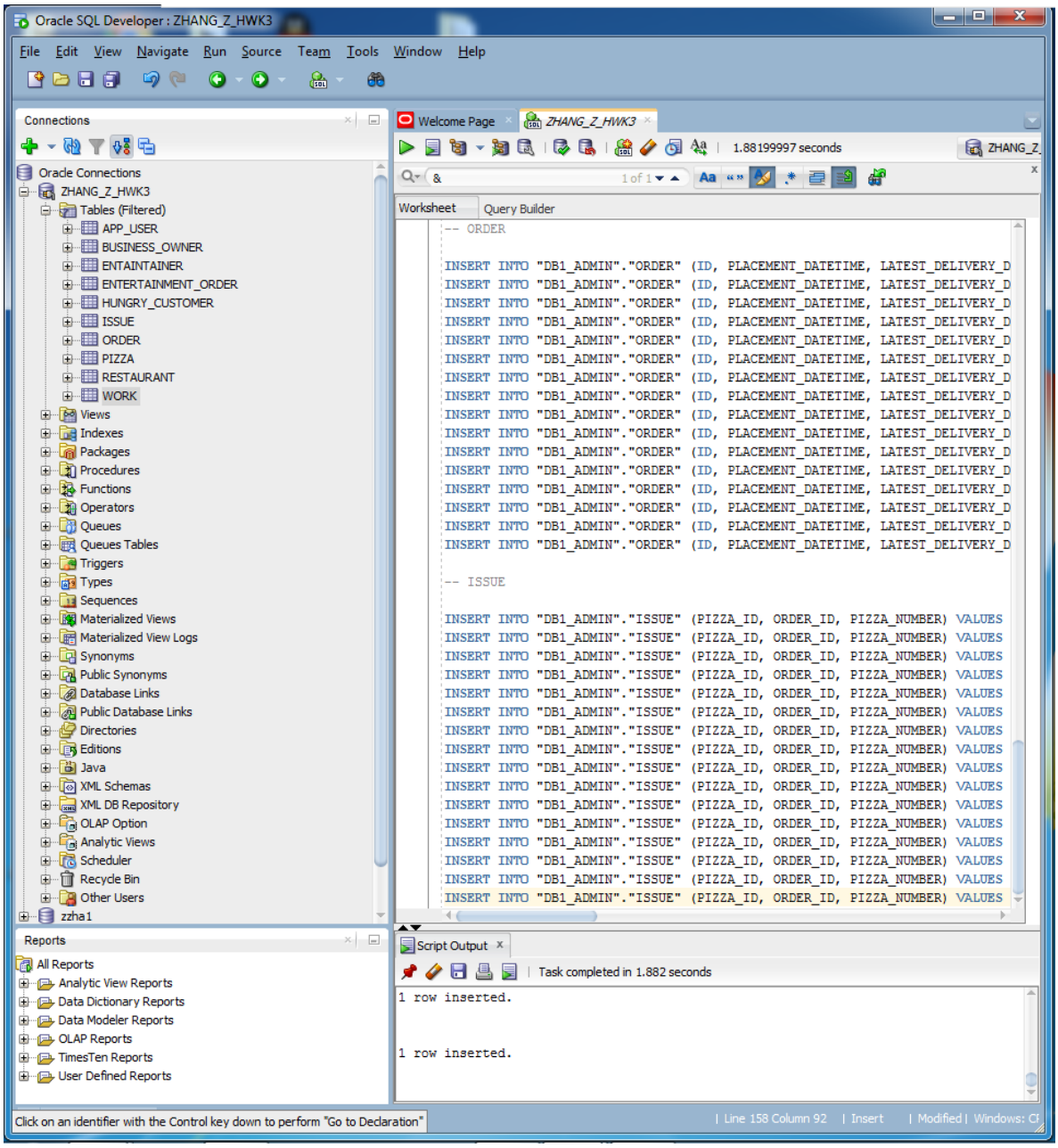
```
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('3', '6', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:30:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('7', '7', 'Monday-Sunday', TO_DATE('1970-01-01
13:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('2', '7', 'Monday-Sunday', TO_DATE('1970-01-01
13:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 21:00:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('8', '8', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:30:00', 'YYYY-MM-DD
HH24:MI:SS'));
INSERT INTO "DB1_ADMIN"."WORK" (ENTERTAINER_ID, RESTAURANT_ID, WEEKDAY,
START_TIME, END_TIME) VALUES ('1', '8', 'Monday-Sunday', TO_DATE('1970-01-01
11:00:00', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('1970-01-01 20:30:00', 'YYYY-MM-DD
HH24:MI:SS'));

-- PIZZA

INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('1', 'MARGHERITA', 'Paradiso Tomato Sauce, Basil, Buffalo
Mozzarella', '2000', '7');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('2', 'MACELLAIO', 'Paradiso Tomato Sauce, Pepperoni,
Mozzarella, Pork Sausage, Red Onions', '2100', '7');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('3', 'BOSCO', 'Paradiso Tomato Sauce, Spinach,
Mozzarella, Mushrooms, Red Onions', '2000', '2');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('4', 'QUATTRO FORMAGGI', 'Gorgonzola, Pecorino, Grana
Padano, Mozzarella, Minced Garlic, Parsley', '2000', '2');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('5', 'SANTA CRUZ', 'basil pesto, roasted artichokes,
smoked onion, mozz, manchego', '2000', '8');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('6', 'SEDGEWICK', 'whipped ricotta, mozz, taleggio, parm,
truffle honey, chives', '2000', '8');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('7', 'CHICKEN PANEER', 'House Masala Sauce (contains tree
nuts), Marinated Chicken, Paneer Cheese, Light Green and Chili Peppers, Onions,
Tomato, Cilantro, Jalapeno Sauce', '2649', '6');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('8', 'SUPREME', 'Tomato Sauce, Pepperoni, Sausage, Green
Pepper, Mushroom, Red Onions, Mozzarella', '2649', '6');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('9', 'Ultimate Cheese', 'Our tomato sauce, fontina,
taleggio, mozz, thyme, parsley oil drizzle', '2200', '5');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('10', 'Double Pepperoni', 'Our tomato sauce, mozz, lotsa
pepperoni, fresh oregano', '2200', '5');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('11', 'Berkeley', 'mozzarella, portobella mushrooms,
onions, kalamata olives, red bell peppers, garlic, and zucchini.', '2095', '4');
```

```
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('12', 'Lincoln Park', 'mozzarella, garlic olive oil,
zucchini, fresh tomatoes, feta and fresh basil.', '1995', '4');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('13', 'Cheese Pizza', 'cheese', '799', '3');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('14', 'Four Topping Pizza', 'Build Your Own Pizza',
'1049', '3');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('15', 'Tomato and Cheese Pizza', 'selfserve', '1499',
'1');
INSERT INTO "DB1_ADMIN"."PIZZA" (ID, NAME, CRUST_STRUCTURE, PRICE,
RESTAURANT_ID) VALUES ('16', '4 item pizza', 'selfserve', '2099', '1');

-- ENTERTAINMENT_ORDER

INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('1', 'singing', '30', '1');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('2', 'making jokes', '30', '2');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('3', 'doing magic tricks', '30', '3');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('4', 'dancing', '30', '4');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('5', 'singing', '30', '5');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('6', 'making jokes', '30', '6');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('7', 'doing magic tricks', '30', '7');
INSERT INTO "DB1_ADMIN"."ENTERTAINMENT_ORDER" (ID, TYPE, DURATION,
ENTERTAINER_ID) VALUES ('8', 'dancing', '30', '8');

-- PIZZA_ORDER

INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('1', TO_DATE('2020-04-14 20:44:29', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 20:45:17', 'YYYY-MM-DD HH24:MI:SS'), '2', '1',
'1');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('2', TO_DATE('2020-04-14 14:44:32', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:20', 'YYYY-MM-DD HH24:MI:SS'), '3', '2',
'2');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('3', TO_DATE('2020-04-14 14:44:35', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:22', 'YYYY-MM-DD HH24:MI:SS'), '4', '3',
'3');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('4', TO_DATE('2020-04-14 14:44:38', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:25', 'YYYY-MM-DD HH24:MI:SS'), '6', '4',
'4');
```

```
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('5', TO_DATE('2020-04-14 14:44:41', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:27', 'YYYY-MM-DD HH24:MI:SS'), '5', '5',
'5');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('6', TO_DATE('2020-04-14 14:44:44', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:30', 'YYYY-MM-DD HH24:MI:SS'), '1', '6',
'6');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('7', TO_DATE('2020-04-14 14:44:47', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:33', 'YYYY-MM-DD HH24:MI:SS'), '8', '7',
'7');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, ENTERTAINMENT_ORDER_ID,
HUNGRY_CUSTOMER_ID) VALUES ('8', TO_DATE('2020-04-14 14:44:50', 'YYYY-MM-DD
HH24:MI:SS'), TO_DATE('2020-04-15 14:45:36', 'YYYY-MM-DD HH24:MI:SS'), '7', '8',
'8');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('9',
TO_DATE('2020-04-14 16:41:03', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:22', 'YYYY-MM-DD HH24:MI:SS'), '4', '1');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('10',
TO_DATE('2020-04-14 16:41:07', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:26', 'YYYY-MM-DD HH24:MI:SS'), '4', '2');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('11',
TO_DATE('2020-04-14 16:41:10', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:29', 'YYYY-MM-DD HH24:MI:SS'), '4', '3');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('12',
TO_DATE('2020-04-14 16:41:12', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:32', 'YYYY-MM-DD HH24:MI:SS'), '4', '4');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('13',
TO_DATE('2020-04-14 16:41:13', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:35', 'YYYY-MM-DD HH24:MI:SS'), '4', '5');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('14',
TO_DATE('2020-04-14 16:41:16', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:37', 'YYYY-MM-DD HH24:MI:SS'), '4', '6');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('15',
TO_DATE('2020-04-14 16:41:18', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:40', 'YYYY-MM-DD HH24:MI:SS'), '4', '7');
INSERT INTO "DB1_ADMIN"."PIZZA_ORDER" (ID, PLACEMENT_DATETIME,
LATEST_DELIVERY_DATETIME, PEOPLE_NUMBER, HUNGRY_CUSTOMER_ID) VALUES ('16',
TO_DATE('2020-04-14 16:41:20', 'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2020-04-15
16:41:43', 'YYYY-MM-DD HH24:MI:SS'), '4', '8');

-- ISSUE

INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('15', '1', '2');
```

```
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('3', '2', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('13', '3', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('11', '4', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('9', '5', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('7', '6', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('1', '7', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('5', '8', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('16', '9', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('4', '10', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('14', '11', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('12', '12', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('10', '13', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('8', '14', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('2', '15', '2');
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, PIZZA_ORDER_ID, PIZZA_NUMBER) VALUES
('6', '16', '2');
```

Result:


Oracle SQL Developer : ZHANG_Z_HWK3
File Edit View Navigate Run Source Team Tools Window Help
Connections
Oracle Connections
ZHANG_Z_HWK3
Tables (Filtered)
APP_USER
BUSINESS_OWNER
ENTAINTAINER
ENTERTAINMENT_ORDER
HUNGRY_CUSTOMER
ISSUE
ORDER
PIZZA
RESTAURANT
WORK
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Materialized Views
Materialized View Logs
Synonyms
Public Synonyms
Database Links
Public Database Links
Directories
Editions
Java
XML Schemas
XML DB Repository
OLAP Option
Analytic Views
Scheduler
Recycle Bin
Other Users
zzha1
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
Welcome Page
ZHANG_Z_HWK3
1.88199997 seconds
Worksheet
Query Builder
-- ORDER
INSERT INTO "DB1_ADMIN"."ORDER" (ID, PLACEMENT_DATETIME, LATEST_DELIVERY_D
-- ISSUE
INSERT INTO "DB1_ADMIN"."ISSUE" (PIZZA_ID, ORDER_ID, PIZZA_NUMBER) VALUES
Script Output
Task completed in 1.882 seconds
1 row inserted.
1 row inserted.
Click on an identifier with the Control key down to perform "Go to Declaration"
Line 158 Column 92
Insert
Modified

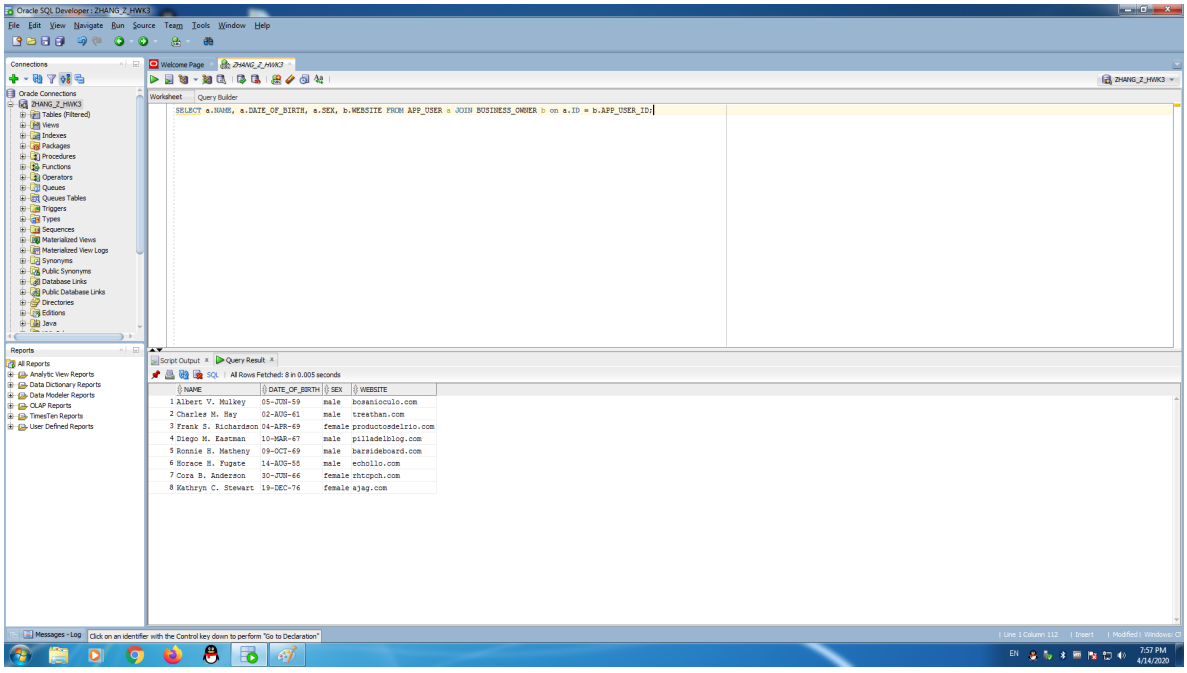
q

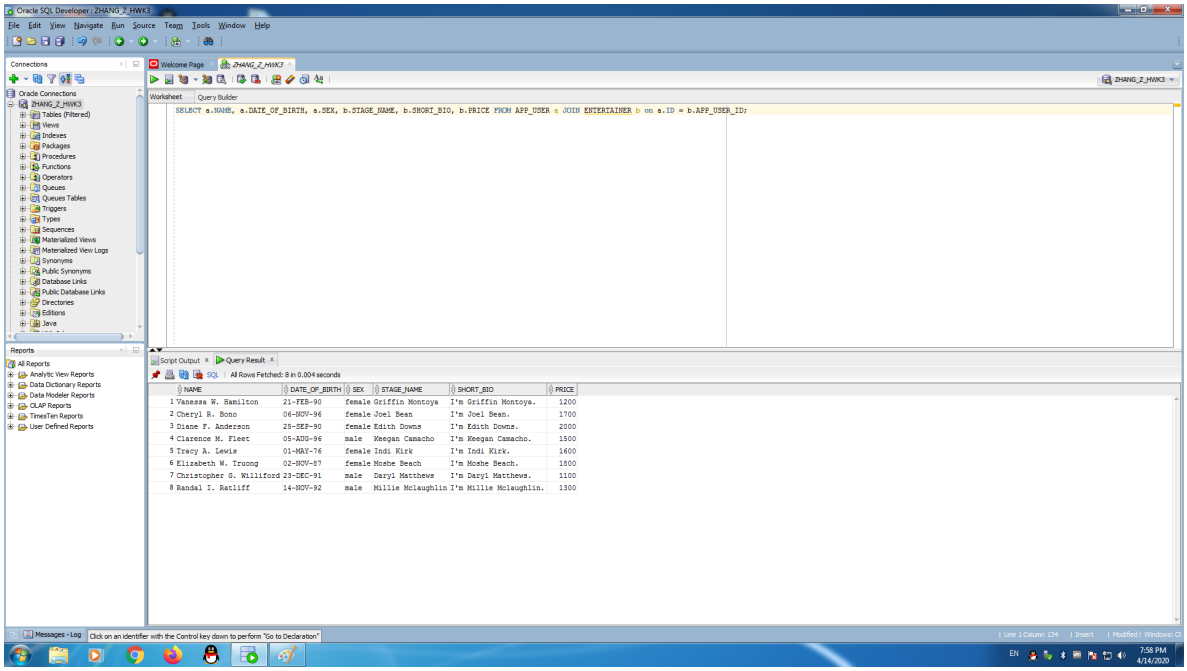
> (q) Create at least 5 select statements to display data from the database schema.

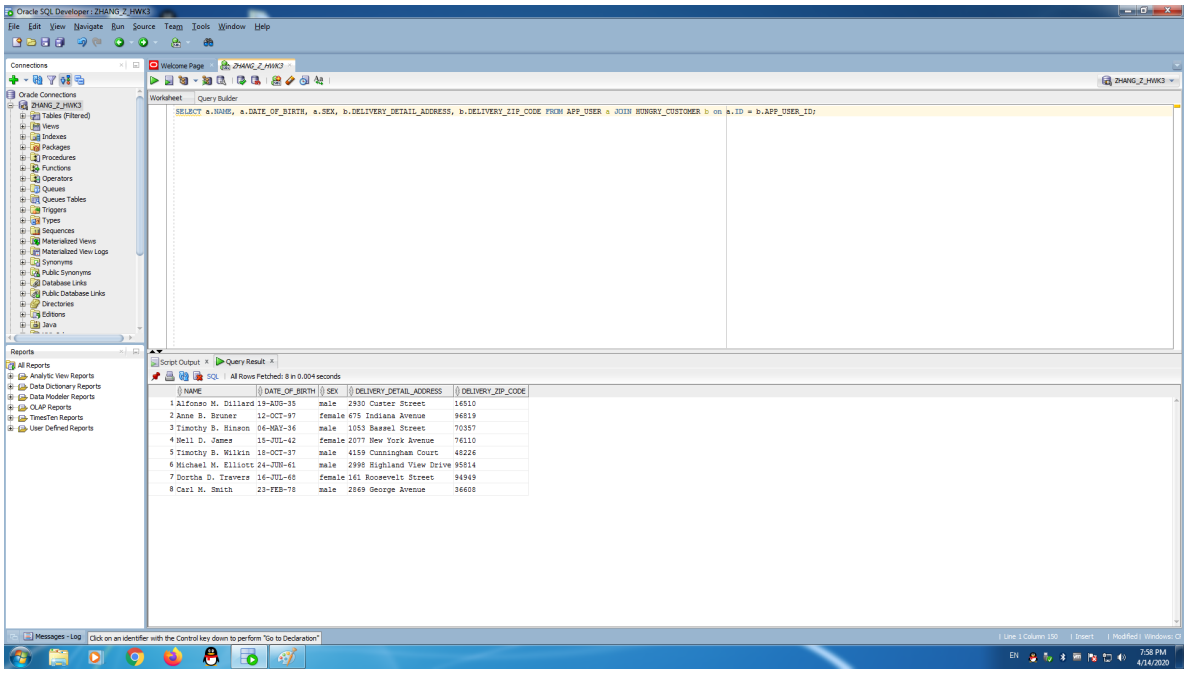
Script:

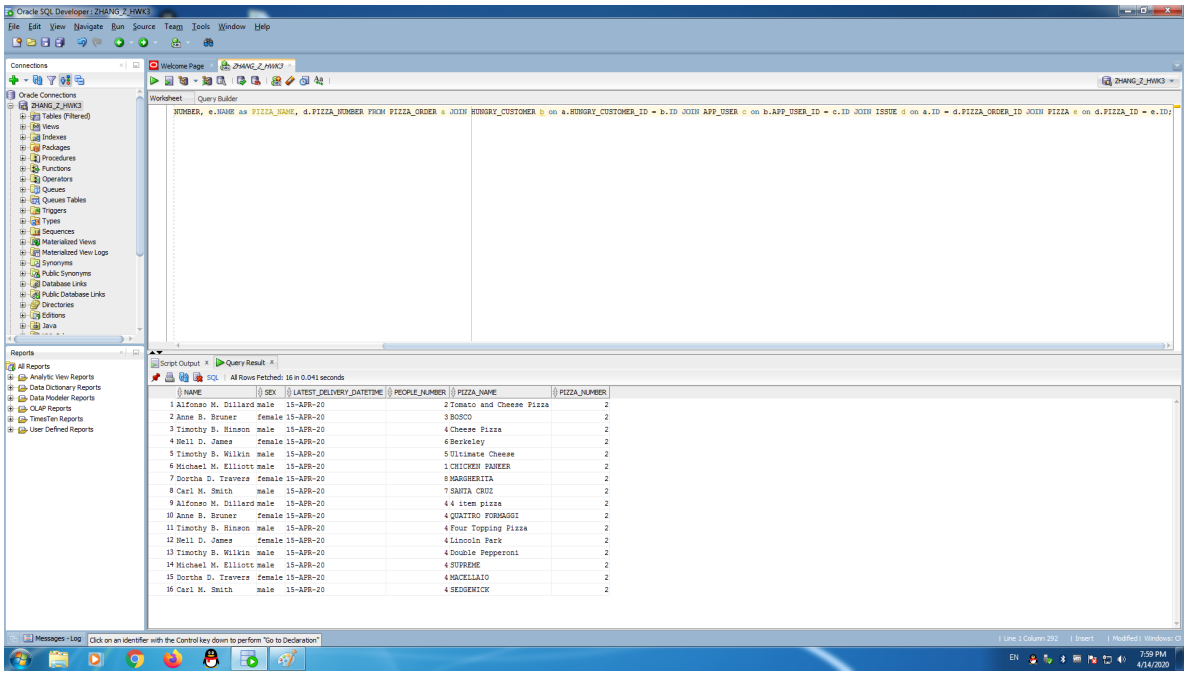
```
SELECT a.NAME, a.DATE_OF_BIRTH, a.SEX, b.WEBSITE FROM APP_USER a JOIN
BUSINESS_OWNER b on a.ID = b.APP_USER_ID;

SELECT a.NAME, a.DATE_OF_BIRTH, a.SEX, b.STAGE_NAME, b.SHORT_BIO, b.PRICE FROM
APP_USER a JOIN ENTERTAINER b on a.ID = b.APP_USER_ID;

SELECT a.NAME, a.DATE_OF_BIRTH, a.SEX, b.DELIVERY_DETAIL_ADDRESS,
b.DELIVERY_ZIP_CODE FROM APP_USER a JOIN HUNGRY_CUSTOMER b on a.ID =
b.APP_USER_ID;

SELECT c.NAME, c.SEX, a.LATEST_DELIVERY_DATETIME, a.PEOPLE_NUMBER, e.NAME as
PIZZA_NAME, d.PIZZA_NUMBER FROM PIZZA_ORDER a JOIN HUNGRY_CUSTOMER b on
a.HUNGRY_CUSTOMER_ID = b.ID JOIN APP_USER c on b.APP_USER_ID = c.ID JOIN ISSUE d
on a.ID = d.PIZZA_ORDER_ID JOIN PIZZA e on d.PIZZA_ID = e.ID;

SELECT c.NAME, c.SEX, a.LATEST_DELIVERY_DATETIME, a.PEOPLE_NUMBER, e.STAGE_NAME,
d.TYPE, d.DURATION FROM PIZZA_ORDER a JOIN HUNGRY_CUSTOMER b on
a.HUNGRY_CUSTOMER_ID = b.ID JOIN APP_USER c on b.APP_USER_ID = c.ID JOIN
ENTERTAINMENT_ORDER d on a.ENTERTAINMENT_ORDER_ID = d.ID JOIN ENTERTAINER e on
d.ENTERTAINER_ID = e.ID;
```

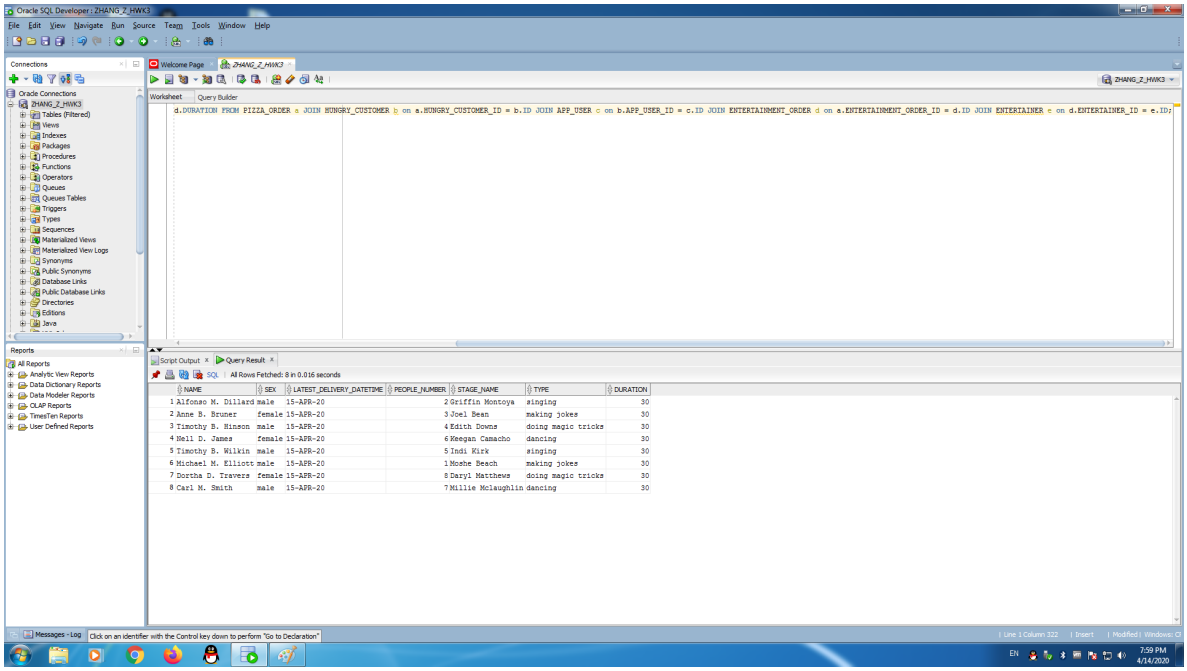
Result:




Oracle SQL Developer : ZHANG_Z_HWK3
SELECT a.NAME, a.DATE_OF_BIRTH, a.SEX, b.STAGE_NAME, b.SHORT_BIO, b.PRICE FROM APP_USER a JOIN ENTERTAINER b on a.ID = b.APP_USER_ID;
All Rows Fetched: 8 in 0.004 seconds
NAME | DATE_OF_BIRTH | SEX | STAGE_NAME | SHORT_BIO | PRICE
1 Vanessa W. Hamilton | 21-FEB-90 | female | Griffin Montoya | I'm Griffin Montoya. | 1200
2 Cheryl R. Bono | 04-NOV-96 | female | Joel Bean | I'm Joel Bean. | 1700
3 Diane F. Anderson | 25-SEP-90 | female | Edith Downs | I'm Edith Downs. | 2000
4 Clarence M. Fleet | 05-AUG-96 | male | Keegan Camacho | I'm Keegan Camacho. | 1500
5 Tracy A. Lewis | 01-MAY-76 | female | Indi Kirk | I'm Indi Kirk. | 1600
6 Elizabeth W. Truong | 02-NOV-87 | female | Moshe Beach | I'm Moshe Beach. | 1800
7 Christopher G. Williford | 23-DEC-91 | male | Daryl Matthews | I'm Daryl Matthews. | 1100
8 Randal I. Ratliff | 14-NOV-92 | male | Millie Mclaughlin | I'm Millie Mclaughlin. | 1300


Oracle SQL Developer : ZHANG_Z_HWK3
SELECT a.NAME, a.DATE_OF_BIRTH, a.SEX, b.DELIVERY_DETAIL_ADDRESS, b.DELIVERY_ZIP_CODE FROM APP_USER a JOIN HUNGRY_CUSTOMER b on a.ID = b.APP_USER_ID;
All Rows Fetched: 8 in 0.004 seconds
NAME | DATE_OF_BIRTH | SEX | DELIVERY_DETAIL_ADDRESS | DELIVERY_ZIP_CODE
1 Alfonso M. Dillard | 19-AUG-35 | male | 2930 Custer Street | 16510
2 Anne B. Bruner | 12-OCT-97 | female | 675 Indiana Avenue | 96819
3 Timothy B. Hinson | 06-MAY-36 | male | 1053 Bassel Street | 70357
4 Nell D. James | 15-JUL-42 | female | 2077 New York Avenue | 76110
5 Timothy B. Wilkin | 18-OCT-37 | male | 4159 Cunningham Court | 48226
6 Michael M. Elliott | 24-JUN-61 | male | 2998 Highland View Drive | 95814
7 Dortha D. Travers | 16-JUL-68 | female | 161 Roosevelt Street | 94949
8 Carl M. Smith | 23-FEB-78 | male | 2869 George Avenue | 36608


Oracle SQL Developer : ZHANG_Z_HWK3
NUMBER, e.NAME as PIZZA_NAME, d.PIZZA_NUMBER FROM PIZZA_ORDER a JOIN HUNGRY_CUSTOMER b on a.HUNGRY_CUSTOMER_ID = b.ID JOIN APP_USER c on b.APP_USER_ID = c.ID JOIN ISSUE d on a.ID = d.PIZZA_ORDER_ID JOIN PIZZA e on d.PIZZA_ID = e.ID;
All Rows Fetched: 16 in 0.041 seconds
NAME | SEX | LATEST_DELIVERY_DATETIME | PEOPLE_NUMBER | PIZZA_NAME | PIZZA_NUMBER
1 Alfonso M. Dillard | male | 15-APR-20 | 2 | Tomato and Cheese Pizza | 2
2 Anne B. Bruner | female | 15-APR-20 | 3 | BOSCO | 2
3 Timothy B. Hinson | male | 15-APR-20 | 4 | Cheese Pizza | 2
4 Nell D. James | female | 15-APR-20 | 6 | Berkeley | 2
5 Timothy B. Wilkin | male | 15-APR-20 | 5 | Ultimate Cheese | 2
6 Michael M. Elliott | male | 15-APR-20 | 1 | CHICKEN PANEER | 2
7 Dortha D. Travers | female | 15-APR-20 | 8 | MARGHERITA | 2
8 Carl M. Smith | male | 15-APR-20 | 7 | SANTA CRUZ | 2
9 Alfonso M. Dillard | male | 15-APR-20 | 4 | 4 item pizza | 2
10 Anne B. Bruner | female | 15-APR-20 | 4 | QUATTRO FORMAGGI | 2
11 Timothy B. Hinson | male | 15-APR-20 | 4 | Four Topping Pizza | 2
12 Nell D. James | female | 15-APR-20 | 4 | Lincoln Park | 2
13 Timothy B. Wilkin | male | 15-APR-20 | 4 | Double Pepperoni | 2
14 Michael M. Elliott | male | 15-APR-20 | 4 | SUPREME | 2
15 Dortha D. Travers | female | 15-APR-20 | 4 | MACELLAIO | 2
16 Carl M. Smith | male | 15-APR-20 | 4 | SEDGEWICK | 2


Oracle SQL Developer : ZHANG_Z_HWK3
File Edit View Navigate Run Source Team Tools Window Help
Connections
Oracle Connections
ZHANG_Z_HWK3
Tables (Filtered)
Views
Indexes
Packages
Procedures
Functions
Operators
Queues
Queues Tables
Triggers
Types
Sequences
Materialized Views
Materialized View Logs
Synonyms
Public Synonyms
Database Links
Public Database Links
Directories
Editions
Java
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
Welcome Page
ZHANG_Z_HWK3
Worksheet
Query Builder
d.DURATION FROM PIZZA_ORDER a JOIN HUNGRY_CUSTOMER b on a.HUNGRY_CUSTOMER_ID = b.ID JOIN APP_USER c on b.APP_USER_ID = c.ID JOIN ENTERTAINMENT_ORDER d on a.ENTERTAINMENT_ORDER_ID = d.ID JOIN ENTERTAINER e on d.ENTERTAINER_ID = e.ID;
Script Output
Query Result
All Rows Fetched: 8 in 0.016 seconds
NAME SEX LATEST_DELIVERY_DATETIME PEOPLE_NUMBER STAGE_NAME TYPE DURATION
1 Alfonso M. Dillard male 15-APR-20 2 Griffin Montoya singing 30
2 Anne B. Bruner female 15-APR-20 3 Joel Bean making jokes 30
3 Timothy B. Hinson male 15-APR-20 4 Edith Downs doing magic tricks 30
4 Nell D. James female 15-APR-20 6 Keegan Camacho dancing 30
5 Timothy B. Wilkin male 15-APR-20 5 Indi Kirk singing 30
6 Michael M. Elliott male 15-APR-20 1 Moshe Beach making jokes 30
7 Dortha D. Travers female 15-APR-20 8 Daryl Matthews doing magic tricks 30
8 Carl M. Smith male 15-APR-20 7 Millie Mclaughlin dancing 30
Messages - Log
Click on an identifier with the Control key down to perform "Go to Declaration"
Line 1 Column 322
Insert
Modified
Windows: Cl
EN
7:59 PM
4/14/2020

r

> (r) Create at least 5 delete and 5 update SQL statements.

```
-- UPDATE

UPDATE ENTERTAINER SET PRICE = '1245' WHERE ID = 1;
UPDATE ENTERTAINER SET PRICE = '1795' WHERE ID = 2;
UPDATE ENTERTAINER SET PRICE = '1995' WHERE ID = 3;
UPDATE ENTERTAINER SET PRICE = '1545' WHERE ID = 4;
UPDATE ENTERTAINER SET PRICE = '1695' WHERE ID = 5;
UPDATE ENTERTAINER SET PRICE = '1845' WHERE ID = 6;
UPDATE ENTERTAINER SET PRICE = '1145' WHERE ID = 7;
UPDATE ENTERTAINER SET PRICE = '1395' WHERE ID = 8;

-- DELETE

DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 11;
DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 12;
DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 13;
DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 14;
DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 15;
DELETE FROM ISSUE WHERE PIZZA_ORDER_ID = 16;
DELETE FROM PIZZA_ORDER WHERE ID = 11;
DELETE FROM PIZZA_ORDER WHERE ID = 12;
DELETE FROM PIZZA_ORDER WHERE ID = 13;
DELETE FROM PIZZA_ORDER WHERE ID = 14;
DELETE FROM PIZZA_ORDER WHERE ID = 15;
DELETE FROM PIZZA_ORDER WHERE ID = 16;
```

s

> (s)Build a PL/SQL procedure that creates a “Hungry Customers Report”. The reports contains the name, address, date of sale, pizza type, cost, and at the end the total costs. NOTE: the number of entities in your design could be larger that in the solution below.

It is really hard for me to provide a prefect solution with cursor in PL/SQL (after trying so many time), so I just provide the core SQL query script.

```
SELECT a.ID as HUNGRY_CUSTOMER_ID, b.NAME, a.DELIVERY_DETAIL_ADDRESS,
a.DELIVERY_ZIP_CODE, c.LATEST_DELIVERY_DATETIME, e.NAME as PIZZA_NAME, e.PRICE,
d.PIZZA_NUMBER
FROM HUNGRY_CUSTOMER a
JOIN APP_USER b on a.APP_USER_ID = b.ID
JOIN PIZZA_ORDER c on c.HUNGRY_CUSTOMER_ID = a.ID
JOIN ISSUE d on d.PIZZA_ORDER_ID = c.ID
JOIN PIZZA e on e.ID = d.PIZZA_ID;
```

Summary

By doing this homework, I learn how to design a database system from data modeling to SQL realization. It is really a good experience.