MacroHard Computer Store

Group 1

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Final Report

Introduction

MacroHard is a computer store that sells various pieces of computer software and hardware. This database is a representation of the store's backend systems which include inventory, transactions, employees, departments, and customer accounts.

Division of Labor

Damon - Database API, setting up database with AWS, database queries
Nathan - Documentation and Reports, frontend and backend support, SQL statement verification
Mohammed - Writing SQL statements to generate and populate the tables
Christian - Writing SQL statements to generate the tables, frontend design and development

Problem to Solve

Creation of a model that represents the workings of a computer store using knowledge we gained over the course of this class.

The model will simulate:
- Transactions and orders
- Inventory management
- Departments and their employees
- Customers and their store accounts

Database Requirements

1) Department
    a) A Department will have a unique manually entered numeric primary key (Department ID)
    b) A Department will have a unique name that is required and can be up to 255 characters
    c) A Department is related to one or more Employees but an Employee is only related to a single Department
    d) A Department is related to zero or more Units but a Unit is only related to a single Department

2) Unit
    a) A Unit will have a unique manually entered numeric primary key (Model Number)
    b) A Unit can have a manufacturer name which can be up to 255 characters
    c) A Unit can have a numeric quantity value
    d) A Unit can have a custom tag which can be up to 255 characters
    e) A Unit can have a serial number which can be up to 255 characters
    f) A Unit can have a numeric price value, can be fractional
    g) A Unit is related to only one Department but a Department can be related to zero or more Units

3) Employee
    a) An Employee will have a unique manually entered numeric primary key (Employee ID)
    b) An Employee is only related to a single Department but a Department is related to one or more Employees
    c) An Employee can be related to zero or more Transactions but a Transaction is only related to a single Employee
    d) An Employee will have a first name which can be up to 255 characters
    e) An Employee can have a last name which can be up to 255 characters
    f) An Employee can have a role which can be up to 255 characters

4) Customer Account
    a) A Customer Account will have a unique manually entered numeric primary key (Account ID)

b) A Customer Account will have a first name which can be up to 255 characters
c) A Customer Account can have a last name which can be up to 255 characters
d) A Customer Account can have a phone number which can be up to 255 characters
e) A Customer Account will have a unique email which can be up to 255 characters
f) A Customer Account can have a home address which can be up to 255 characters
g) A Customer Account can have a payment method which can be up to 255 characters
h) A Customer Account is related to 0 or more Customer Orders but a Customer Order can only be related to a single Customer Account
i) A Customer Account is related to only one Rewards table and a Rewards table is only related to one Customer Account

5) Customer Order
a) A Customer Order will have a unique manually entered numeric primary key (Customer Order Number)
b) A Customer Order is related to a single Customer Account but a Customer Account is related to 0 or more Customer Orders
c) A Customer Order is related to a single Transaction but a Transaction can be related to 0 or 1 Customer Orders

6) Transaction
a) A Transaction will have a unique manually entered numeric primary key (Transaction ID)
b) A Transaction will have a payment method which can be up to 255 characters
c) A Transaction can have a date which can be up to 255 characters
d) A Transaction can have a time which can be up to 255 characters
e) A Transaction will have a numeric total value, can be fractional
f) A Transaction can be related to 0 or 1 Customer Orders but a Customer Order is related to a single Transaction
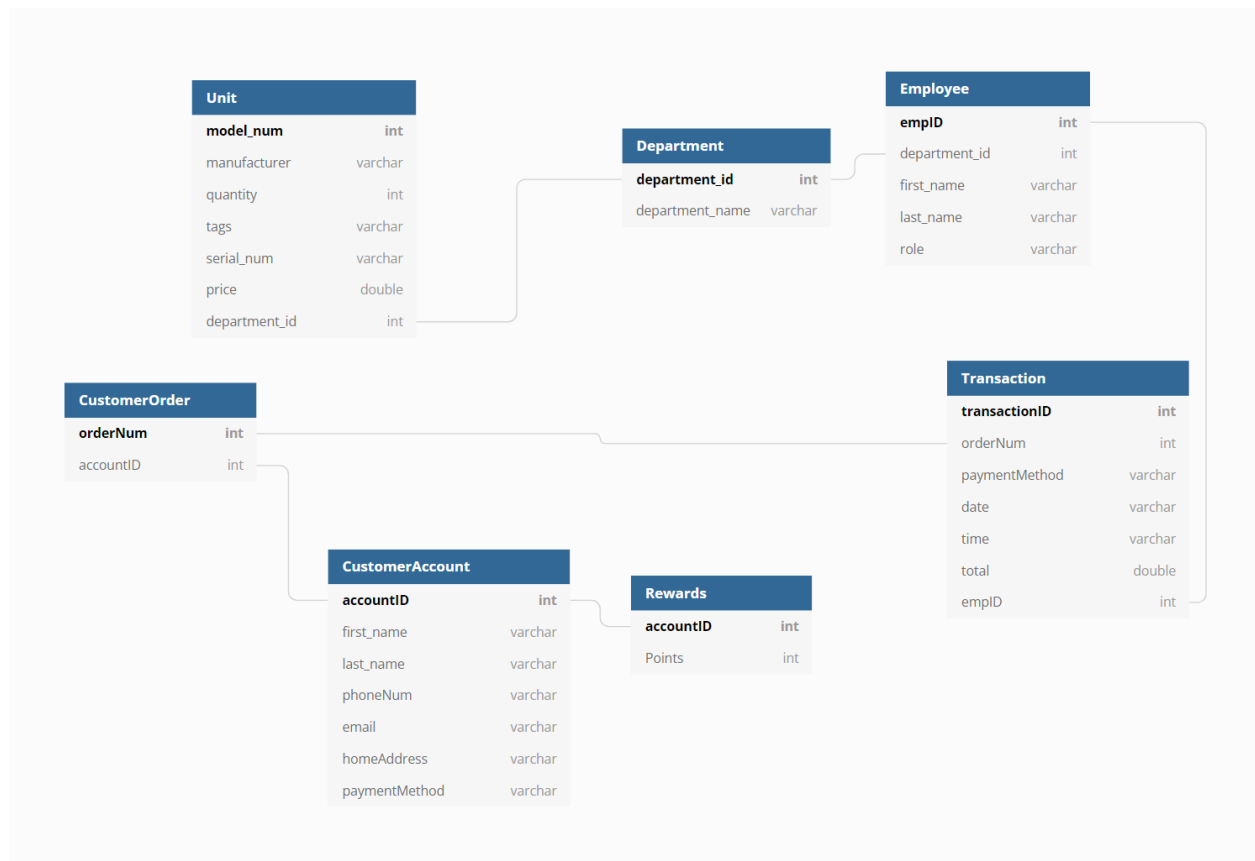g) A Transaction is only related to a single Employee but an Employee is related to zero or more Transactions

7) Rewards
    a) A Reward is only related to a single Customer Account and a Customer Account is only related to a single Reward
    b) A Reward can have a numeric points value

ER Diagram
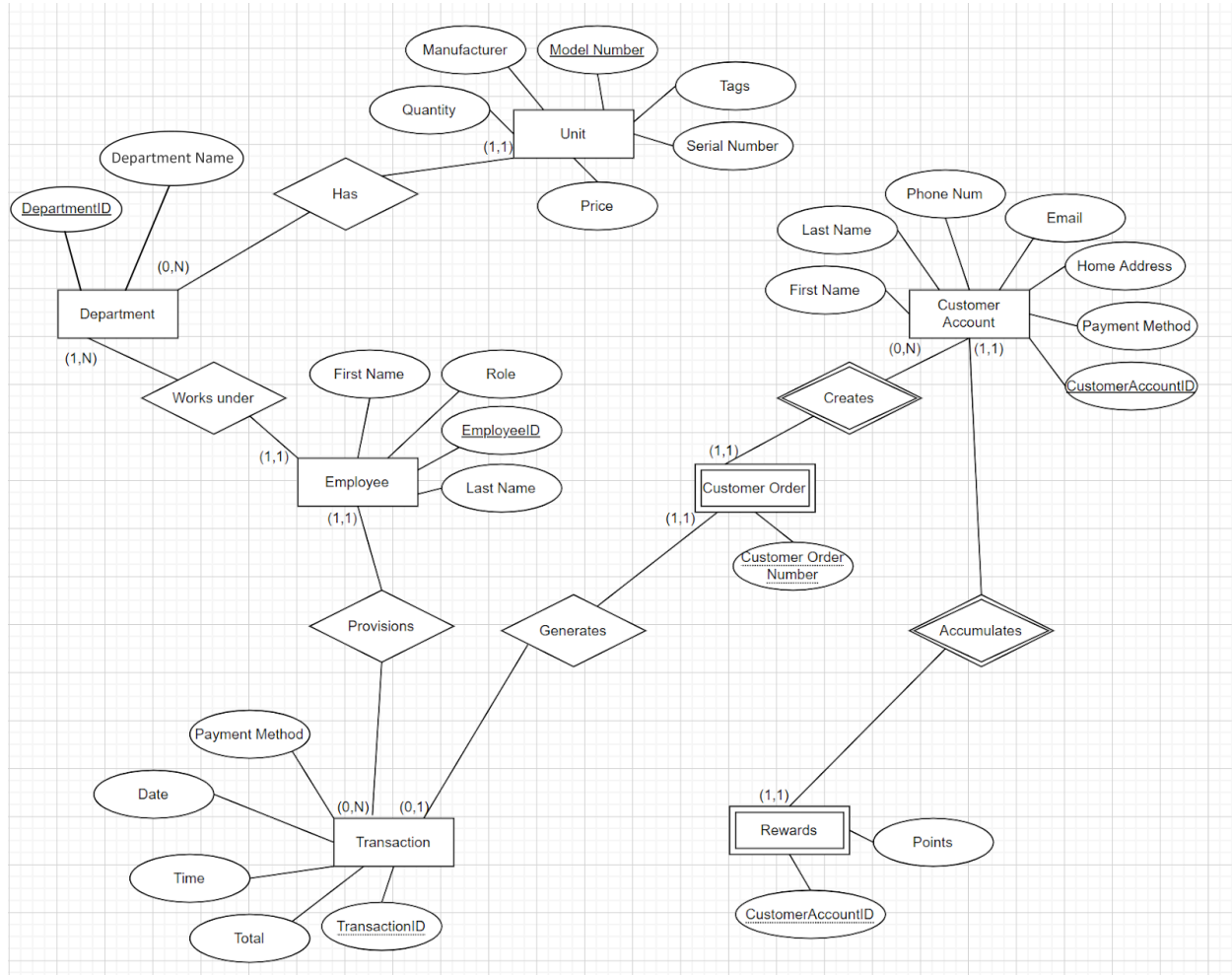
Schema Diagram

Database Model Features

This database does not have any special features, constraints, or stored procedures.

Future Scope

There are several enhancements that can be incorporated into the database in the future, including enhanced database security, the ability for employees with the manager role to host a temporary sale for every unit in their department, and a complete frontend application.

Deficiencies

Poor database security and an incomplete frontend application.

GitHub Link

https://github.com/christian-chapman/MacroHard-Computer-Store-Project

SQL to Create Schema

```
CREATE DATABASE macrohard;

CREATE TABLE `macrohard`.`department` (
  `department_id` INT NOT NULL,
  `department_name` VARCHAR(255) NOT NULL,
  UNIQUE INDEX `department_id_UNIQUE` (`department_id` ASC) VISIBLE,
  UNIQUE INDEX `department_name_UNIQUE` (`department_name` ASC) VISIBLE,
  PRIMARY KEY (`department_id`));

CREATE TABLE `macrohard`.`unit` (
  `model_num` INT NOT NULL,
  `manufacturer` VARCHAR(255) NULL,
  `quantity` INT NULL,
  `tags` VARCHAR(255) NULL,
  `serial_num` VARCHAR(255) NULL,
  `price` DOUBLE NOT NULL,
  `department_id` INT NOT NULL,
  PRIMARY KEY (`model_num`),
  UNIQUE INDEX `model_num_UNIQUE` (`model_num` ASC) VISIBLE,
  INDEX `unit.department_id_idx` (`department_id` ASC) VISIBLE,
  CONSTRAINT `unit.department_id`
    FOREIGN KEY (`department_id`)
    REFERENCES `macrohard`.`department` (`department_id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION);


CREATE TABLE `macrohard`.`employee` (
  `emp_id` INT NOT NULL,
  `department_id` INT NOT NULL,
  `first_name` VARCHAR(255) NOT NULL,
  `last_name` VARCHAR(255) NULL,
  `emp_role` VARCHAR(255) NOT NULL,
  UNIQUE INDEX `emp_id_UNIQUE` (`emp_id` ASC) VISIBLE,
  PRIMARY KEY (`emp_id`),
  INDEX `employee.department_id_idx` (`department_id` ASC) VISIBLE,
  CONSTRAINT `employee.department_id`
    FOREIGN KEY (`department_id`)
    REFERENCES `macrohard`.`department` (`department_id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION);
```

```
CREATE TABLE `macrohard`.`customeraccount` (
  `accountID` INT NOT NULL,
  `first_name` VARCHAR(255) NOT NULL,
  `last_name` VARCHAR(255) NULL,
  `phoneNum` VARCHAR(255) NULL,
  `email` VARCHAR(255) NOT NULL,
  `homeAddress` VARCHAR(255) NULL,
  `paymentMethod` VARCHAR(255) NULL,
  PRIMARY KEY (`accountID`),
  UNIQUE INDEX `accountID_UNIQUE` (`accountID` ASC) VISIBLE,
  UNIQUE INDEX `email_UNIQUE` (`email` ASC) VISIBLE);


CREATE TABLE `macrohard`.`customerorder` (
  `OrderNum` INT NOT NULL,
  `accountID` INT NOT NULL,
  PRIMARY KEY (`OrderNum`),
  INDEX `CustomerOrder.accountID_idx` (`accountID` ASC) VISIBLE,
  UNIQUE INDEX `OrderNum_UNIQUE` (`OrderNum` ASC) VISIBLE,
  CONSTRAINT `CustomerOrder.accountID`
    FOREIGN KEY (`accountID`)
    REFERENCES `macrohard`.`customeraccount` (`accountID`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION);

CREATE TABLE `macrohard`.`transaction` (
  `TransactionID` INT NOT NULL,
  `orderNum` INT NULL,
  `paymentMethod` VARCHAR(255) NOT NULL,
  `date` VARCHAR(255) NULL,
  `time` VARCHAR(255) NULL,
  `total` DOUBLE NOT NULL,
  `emp_id` INT NOT NULL,
  PRIMARY KEY (`TransactionID`),
  UNIQUE INDEX `TransactionID_UNIQUE` (`TransactionID` ASC) VISIBLE,
  INDEX `Transaction.orderNum_idx` (`orderNum` ASC) VISIBLE,
  CONSTRAINT `Transaction.orderNum`
    FOREIGN KEY (`orderNum`)
    REFERENCES `macrohard`.`customerorder` (`OrderNum`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,

  CONSTRAINT `Transaction.emp_id`
    FOREIGN KEY (`emp_id`)
    REFERENCES `macrohard`.`employee` (`emp_id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION);

CREATE TABLE `macrohard`.`rewards` (
  `accountID` INT NOT NULL,
  `Points` INT NULL,
  INDEX `Rewards.accountID_idx` (`accountID` ASC) VISIBLE,
  CONSTRAINT `Rewards.accountID`
    FOREIGN KEY (`accountID`)
    REFERENCES `macrohard`.`customeraccount` (`accountID`)
```

```
        ON DELETE NO ACTION
        ON UPDATE NO ACTION);
```

SQL to Populate Schema

Department Table

```
insert into department (department_id, department_name) values (1,
'Engineering');
insert into department (department_id, department_name) values (2,
'Services');
insert into department (department_id, department_name) values (3,
'Operations');
insert into department (department_id, department_name) values (4,
'Sales');
insert into department (department_id, department_name) values (5,
'Inventory');
insert into department (department_id, department_name) values (6, 'Human
Resources');
insert into department (department_id, department_name) values (7,
'Support');
insert into department (department_id, department_name) values (8,
'Business Development');
insert into department (department_id, department_name) values (9,
'Marketing');
insert into department (department_id, department_name) values (10,
'Information Technology');
insert into department (department_id, department_name) values (11, 'Loss
Prevention');
insert into department (department_id, department_name) values (12,
'Research and Development');
```

Unit Table

```
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (1, 'Bednar-Lakin', 118, 'aenean fermentum
donec ut', '0429427603', 5625.91, 1);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (2, 'Moore, Fritsch and Greenholt', 643,
'nulla suspendisse potenti cras', '0237225255', 5351.46, 2);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (3, 'Wisoky-Legros', 909, 'odio porttitor id
consequat in', '6297483124', 3774.68, 3);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (4, 'Volkman-Hirthe', 145, 'vel dapibus at
diam nam', '4669870165', 8500.63, 4);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (5, 'Collins Inc', 718, 'integer ac neque
duis', '6398725360', 3603.79, 5);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (6, 'Kreiger Inc', 406, 'velit vivamus vel',
'3584851653', 7168.13, 6);
```

```
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (7, 'Russel, Schaden and Miller', 63,
'sapien sapien non mi integer', '0004261909', 6358.07, 7);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (8, 'Walsh-Stroman', 294, 'tellus in
sagittis', '5785879123', 1100.3, 8);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (9, 'Dietrich, Pfeffer and Nader', 125,
'posuere cubilia', '7330942219', 1062.16, 9);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (10, 'Heidenreich, Walsh and Hettinger',
885, 'vestibulum quam', '2190178568', 8178.9, 10);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (11, 'O''Keefe Inc', 23, 'interdum mauris',
'3095151640', 9133.55, 11);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (12, 'Hayes-Hilll', 732, 'varius nulla
facilisi', '6617915003', 5368.92, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (13, 'Deckow and Sons', 455, 'condimentum
neque sapien placerat', '1571310002', 1371.87, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (14, 'Kessler and Sons', 909, 'orci luctus',
'7728594621', 2321.62, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (15, 'Becker LLC', 334, 'id nulla',
'8487233627', 1642.55, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (16, 'Kutch LLC', 293, 'cubilia curae',
'8026353722', 7281.46, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (17, 'Reichel-Wehner', 559, 'velit nec nisi
vulputate', '9529695632', 2501.08, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (18, 'Hane-Maggio', 39, 'sed augue aliquam
erat', '5593693633', 3783.48, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (19, 'Koss LLC', 779, 'phasellus sit',
'0000678953', 2619.09, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (20, 'Walker, Schaefer and Barton', 575,
'posuere nonummy integer non', '4301588205', 2288.49, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (21, 'Shields-Leuschke', 479, 'lobortis
vel', '3159180352', 7558.05, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (22, 'Moore, Lubowitz and Beahan', 178,
'vestibulum rutrum rutrum neque aenean', '9133614415', 706.81, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (23, 'Lueilwitz Inc', 19, 'quis turpis eget
elit', '7450449455', 5695.36, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (24, 'Wehner Group', 908, 'augue a
suscipit', '5157490437', 9475.54, 12);
insert into unit (model_num, manufacturer, quantity, tags, serial_num,
price, department_id) values (25, 'Smitham-Wuckert', 334, 'integer ac
neque duis bibendum', '7458032812', 1419.12, 12);
```

Employee Table

```
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (1, 1, 'Filbert', 'Killingworth', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (2, 2, 'Darsey', 'Frosch', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (3, 3, 'Tracy', 'Brunone', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (4, 4, 'Cross', 'Furzer', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (5, 5, 'Alvy', 'Essery', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (6, 6, 'Dukey', 'Castro', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (7, 7, 'Jacobo', 'Kamena', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (8, 8, 'Sherri', 'Conradie', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (9, 9, 'Valenka', 'Brownill', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (10, 10, 'Mauricio', 'Andreaccio', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (11, 11, 'Clarance', 'Leil', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (12, 12, 'Lynnea', 'Sturmey', 'Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (13, 11, 'Gay', 'Symmons', 'Security');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (14, 2, 'Rozalin', 'Sautter', 'Project Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (15, 4, 'Nan', 'Eveling', 'Cashier');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (16, 4, 'Myriam', 'Gammett', 'Cashier');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (17, 4, 'Innis', 'Zammitt', 'Cashier');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (18, 3, 'Cecilla', 'Dreus', 'Accountant');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (19, 5, 'Aaren', 'Lukianovich', 'Shipping Manager');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (20, 4, 'Boyce', 'Flitcroft', 'Cashier');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (21, 7, 'Fremont', 'Dan', 'Tech Support');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (22, 6, 'Laina', 'Ellison', 'Human Resources');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (23, 9, 'Margaretta', 'Arni', 'Marketer');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (24, 10, 'Darcee', 'Woliter', 'IT');
insert into employee (emp_id, department_id, first_name, last_name,
emp_role) values (25, 3, 'Norby', 'Wyllis', 'Janitor');
```

Customer Account Table

```
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (1, 'Amalea', 'Varnam',
'591-805-3832', 'ch784fb7njvs@email.com', '5949 Fallview Way', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (2, 'Thomasa', 'Terbrugge',
'957-823-6174', 'vnqwivunri@email.com', '9 Moulton Point', 'laser');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (3, 'Patience', 'Halversen',
'161-197-2830', 'uwtebvqvr@email.com', '41741 Westend Parkway', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (4, 'Corbet', 'Quiddihy',
'675-810-8908', 'vquiuyitv@email.com', '71573 Arapahoe Alley', 'visa');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (5, 'Andrea', 'Towndrow',
'288-749-5317', 'hfywueift@email.com', '6124 Ridgeview Road', 'laser');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (6, 'Ariela', 'Giannassi',
'137-903-0454', 'caietcnrn9@email.com', '41267 Bobwhite Point',
'instapayment');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (7, 'Onfroi', 'Baal',
'131-183-5286', 'alictenu83@email.com', '72184 Laurel Circle', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (8, 'Alyda', 'Moorfield',
'627-323-9603', 'cpa94ncjh@email.com', '3935 Sage Park', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (9, 'Farrah', 'Dannatt',
'367-132-7439', 'aoqpct7@email.com', '333 Utah Center', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (10, 'Ula', 'Imore',
'736-263-1385', 'c832ncod65@email.com', '90938 Hovde Terrace',
'china-unionpay');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (11, 'Willabella', 'Helliar',
'417-592-6615', 'c903nmcu@email.com', '902 Butterfield Trail',
'mastercard');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (12, 'Hildy', 'Becket',
'131-573-9429', 'c83ndhruj@email.com', '0328 Warrior Center', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (13, 'Gus', 'Lapworth',
'361-539-3051', 'c83ncie@email.com', '28 Killdeer Alley', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (14, 'Kathlin', 'Eliet',
'338-447-3286', 'c903nckds@email.com', '397 Becker Plaza',
'diners-club-enroute');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (15, 'Claudetta', 'Godfree',
'939-574-0353', 's8cn34@email.com', '7 Fairfield Parkway', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (16, 'Carmela', 'Hanna',
'293-509-4299', 'c983nce@email.com', '8 Paget Terrace', 'visa-electron');
```

```
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (17, 'Clerkclaude', 'Farland',
'908-858-4160', 'vwsl389c@email.com', '74 Melby Street', 'maestro');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (18, 'Myra', 'Skellern',
'732-516-3570', 'cn83ncy@email.com', '7144 Lukken Junction', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (19, 'Helen-elizabeth',
'Bonifazio', 'd9n383@email.com', '524-255-1254', '54 Hovde Lane', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (20, 'Edithe', 'Ida',
'977-814-1074', 'aj84bnji@email.com', '39 Colorado Road', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (21, 'Timmie', 'Redmile',
'997-541-8230', '289bdrh@email.com', '53783 Lawn Hill', 'switch');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (22, 'Koo', 'Suatt',
'935-679-0438', 'nmviowinv3@email.com', '596 Michigan Terrace', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (23, 'Valaria', 'Agdahl',
'541-849-8814', 'tuinvbr@email.com', '07 Ruskin Parkway', 'jcb');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (24, 'Ileane', 'Trime',
'948-387-8821', 'qwhuqwr@email.com', '5597 Gateway Lane', 'mastercard');
insert into customeraccount (accountID, first_name, last_name, phoneNum,
email, homeAddress, paymentMethod) values (25, 'Marin', 'Titlow',
'741-736-0804', 'ghjushjgfs@email.com', '645 Ridge Oak Circle',
'maestro');
```

Customer Order Table

```
insert into customerorder (orderNum, accountID) values (1, 1);
insert into customerorder (orderNum, accountID) values (2, 2);
insert into customerorder (orderNum, accountID) values (3, 3);
insert into customerorder (orderNum, accountID) values (4, 4);
insert into customerorder (orderNum, accountID) values (5, 5);
insert into customerorder (orderNum, accountID) values (6, 6);
insert into customerorder (orderNum, accountID) values (7, 7);
insert into customerorder (orderNum, accountID) values (8, 8);
insert into customerorder (orderNum, accountID) values (9, 9);
insert into customerorder (orderNum, accountID) values (10, 10);
insert into customerorder (orderNum, accountID) values (11, 11);
insert into customerorder (orderNum, accountID) values (12, 12);
insert into customerorder (orderNum, accountID) values (13, 13);
insert into customerorder (orderNum, accountID) values (14, 14);
insert into customerorder (orderNum, accountID) values (15, 15);
insert into customerorder (orderNum, accountID) values (16, 16);
insert into customerorder (orderNum, accountID) values (17, 17);
insert into customerorder (orderNum, accountID) values (18, 18);
insert into customerorder (orderNum, accountID) values (19, 19);
insert into customerorder (orderNum, accountID) values (20, 20);
insert into customerorder (orderNum, accountID) values (21, 21);
insert into customerorder (orderNum, accountID) values (22, 22);
insert into customerorder (orderNum, accountID) values (23, 23);
insert into customerorder (orderNum, accountID) values (24, 24);
```

```
insert into customerorder (orderNum, accountID) values (25, 25);
```

Transaction Table

```
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (1, 1, 'jcb', '12/19/2021', '2:42 PM', 1429,
15);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (2, 2, 'switch', '7/10/2021', '11:33 AM',
1477, 16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (3, 3, 'jcb', '2/4/2022', '9:46 PM', 4029,
17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (4, 4, 'jcb', '4/27/2022', '1:07 AM', 8339,
20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (5, 5, 'bankcard', '2/22/2022', '1:48 PM',
1985, 16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (6, 6, 'bankcard', '8/21/2021', '11:57 AM',
2296, 17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (7, 7, 'instapayment', '5/26/2021', '9:51
PM', 9026, 15);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (8, 8, 'maestro', '8/18/2021', '8:03 AM',
2266, 20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (9, 9, 'jcb', '4/1/2022', '5:31 AM', 6149,
16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (10, 10, 'jcb', '9/7/2021', '3:57 AM', 830,
20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (11, 11, 'bankcard', '10/16/2021', '2:29 PM',
5252, 20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (12, 12, 'jcb', '6/8/2021', '8:20 PM', 7228,
17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (13, 13, 'jcb', '2/4/2022', '9:29 AM', 9602,
16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (14, 14, 'maestro', '9/5/2021', '7:03 PM',
750, 17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (15, 15, 'switch', '7/14/2021', '8:19 AM',
1217, 20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (16, 16, 'jcb', '1/27/2022', '1:40 AM', 3758,
15);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (17, 17, 'bankcard', '10/21/2021', '6:27 PM',
500, 17);
```

```
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (18, 18, 'mastercard', '4/18/2022', '2:16
AM', 5933, 17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (19, 19, 'americanexpress', '3/22/2022',
'9:37 PM', 8849, 17);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (20, 20, 'jcb', '9/5/2021', '1:13 AM', 2128,
15);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (21, 21, 'jcb', '9/8/2021', '9:15 PM', 5089,
20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (22, 22, 'jcb', '12/22/2021', '12:31 PM',
7093, 16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (23, 23, 'switch', '11/2/2021', '1:34 AM',
6786, 20);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (24, 24, 'diners-club-enroute', '9/27/2021',
'9:58 AM', 3231, 16);
insert into transaction (TransactionID, orderNum, paymentMethod, date,
time, total, emp_id) values (25, 25, 'jcb', '2/1/2022', '6:36 AM', 8776,
15);
```

Rewards Table

```
insert into rewards (accountID, Points) values (1, 1733);
insert into rewards (accountID, Points) values (2, 1067);
insert into rewards (accountID, Points) values (3, 1342);
insert into rewards (accountID, Points) values (4, 605);
insert into rewards (accountID, Points) values (5, 165);
insert into rewards (accountID, Points) values (6, 1546);
insert into rewards (accountID, Points) values (7, 575);
insert into rewards (accountID, Points) values (8, 1014);
insert into rewards (accountID, Points) values (9, 558);
insert into rewards (accountID, Points) values (10, 199);
insert into rewards (accountID, Points) values (11, 592);
insert into rewards (accountID, Points) values (12, 361);
insert into rewards (accountID, Points) values (13, 1770);
insert into rewards (accountID, Points) values (14, 1835);
insert into rewards (accountID, Points) values (15, 575);
insert into rewards (accountID, Points) values (16, 1107);
insert into rewards (accountID, Points) values (17, 998);
insert into rewards (accountID, Points) values (18, 1218);
insert into rewards (accountID, Points) values (19, 279);
insert into rewards (accountID, Points) values (20, 1446);
insert into rewards (accountID, Points) values (21, 1418);
insert into rewards (accountID, Points) values (22, 527);
insert into rewards (accountID, Points) values (23, 253);
insert into rewards (accountID, Points) values (24, 1914);
insert into rewards (accountID, Points) values (25, 207);
```