Drop & Create Queries :

```
DROP DATABASE IF EXISTS recipe_delight;
CREATE DATABASE IF NOT EXISTS recipe_delight;
USE recipe_delight;

DROP TABLE IF EXISTS Person;
CREATE TABLE Person (
  PersonID INTEGER unsigned NOT NULL auto_increment,
  Email VARCHAR (64) default NULL,
  FirstName VARCHAR (64) default NULL,
  LastName VARCHAR (64) default NULL,
  StreetAddress VARCHAR (64) default NULL,
  City VARCHAR (64) default NULL,
  State VARCHAR (2) default NULL,
  Zipcode INTEGER default NULL,
  PRIMARY KEY (PersonID)
) AUTO_INCREMENT=1;

DROP TABLE IF EXISTS Chef;
CREATE TABLE Chef(
  ChefID INTEGER unsigned NOT NULL auto_increment,
  Specialty VARCHAR (64) default NULL,
  Salary INTEGER default NULL,
  FKPersonID INTEGER unsigned NOT NULL,
  FOREIGN KEY (FKPersonID) REFERENCES Person (personID),
  PRIMARY KEY (ChefID)
) AUTO_INCREMENT=1;

DROP TABLE IF EXISTS Student;
CREATE TABLE Student(
  StudentID INTEGER unsigned NOT NULL auto_increment,
  Major VARCHAR (64) default NULL,
  ExpectedGraduationDate Date default NULL,
  FKPersonID INTEGER unsigned NOT NULL,
  FOREIGN KEY (FKPersonID) REFERENCES person (personID),
  PRIMARY KEY (StudentID)
) AUTO_INCREMENT=1;
```

```
DROP TABLE IF EXISTS LeadChef;
CREATE TABLE LeadChef(
LeadChefID INTEGER unsigned NOT NULL auto_increment,
FKLeadChefID INTEGER unsigned NOT NULL,
PRIMARY KEY (LeadChefID),
foreign key (FKLeadChefID) references Chef(ChefID)
)AUTO_INCREMENT =1;


DROP TABLE IF EXISTS DevelopmentProject;
CREATE TABLE DevelopmentProject(
  ProjectID INTEGER unsigned NOT NULL auto_increment,
  Name VARCHAR(64),
  PRIMARY KEY (ProjectID)
  ) AUTO_INCREMENT=1;


DROP TABLE IF EXISTS Student_DevelopmentProject;
CREATE TABLE Student_DevelopmentProject(
StudentID INTEGER unsigned NOT NULL,
ProjectID INTEGER unsigned NOT NULL,
PRIMARY KEY (StudentID,ProjectID),
FOREIGN KEY (StudentID) REFERENCES Student(StudentID),
FOREIGN KEY (ProjectID) REFERENCES DevelopmentProject(ProjectID)
);

DROP TABLE IF EXISTS LeadChef_DevelopmentProject;
CREATE TABLE LeadChef_DevelopmentProject(
LeadChefID INTEGER unsigned NOT NULL,
ProjectID INTEGER unsigned NOT NULL,
PRIMARY KEY (LeadChefID,ProjectID),
FOREIGN KEY (LeadChefID) REFERENCES LeadChef(LeadChefID),
FOREIGN KEY (ProjectID) REFERENCES DevelopmentProject(ProjectID)
);

DROP TABLE IF EXISTS Chef_DevelopmentProject;
CREATE TABLE Chef_DevelopmentProject(
ChefID INTEGER unsigned NOT NULL,
ProjectID INTEGER unsigned NOT NULL,
PRIMARY KEY (ChefID,ProjectID),
FOREIGN KEY (ChefID) REFERENCES Chef(ChefID),
FOREIGN KEY (ProjectID) REFERENCES DevelopmentProject(ProjectID)
);
```

```
DROP TABLE IF EXISTS Recipe;
CREATE TABLE Recipe(
  RecipeID INTEGER unsigned NOT NULL auto_increment,
  Name VARCHAR (64) default NULL,
  Downloads INTEGER default NULL,
  PublicationDate Date default NULL,
  Category VARCHAR (64)  default NULL,
  Cuisine VARCHAR (64) default NULL,
  NumberServed INTEGER default NULL,
  PRIMARY KEY (RecipeID)
)AUTO_INCREMENT=1;

DROP TABLE IF EXISTS eCookBook;
CREATE TABLE eCookBook(
  eCookBookID INTEGER unsigned NOT NULL AUTO_INCREMENT,
  NumberOfRecipes INTEGER default NULL,
  Theme VARCHAR (64) default NULL,
  Name VARCHAR (64) default NULL,
 PRIMARY KEY (eCookBookID)
)AUTO_INCREMENT=1;

DROP TABLE IF EXISTS SpecialtyEquipment;
CREATE TABLE SpecialtyEquipment(
EquipmentID INTEGER unsigned NOT NULL auto_increment,
Name VARCHAR (64) default NULL,
PRIMARY KEY(EquipmentID)
)AUTO_INCREMENT=1;

DROP TABLE IF EXISTS Ingredient;
CREATE TABLE Ingredient(
IngredientID INTEGER unsigned NOT NULL auto_increment,
Units VARCHAR (64) default NULL,
Name VARCHAR (64) default NULL,
PRIMARY KEY(IngredientID)
)AUTO_INCREMENT = 1;

DROP TABLE IF EXISTS Instruction;
CREATE TABLE Instruction(
InstructionStepID INTEGER unsigned NOT NULL auto_increment,
Instruction VARCHAR (255) default NULL,
PRIMARY KEY(InstructionStepID)
)AUTO_INCREMENT =1;
```

```
DROP TABLE IF EXISTS Award;
CREATE TABLE Award(
AwardID INTEGER unsigned NOT NULL auto_increment,
Name VARCHAR (64) default NULL,
PRIMARY KEY (AwardID)
)AUTO_INCREMENT =1;
DROP TABLE IF EXISTS Recipe_LeadChef;
CREATE TABLE Recipe_leadChef(
RecipeID INTEGER unsigned NOT NULL,
LeadChefID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID,LeadChefID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (LeadChefID) REFERENCES LeadChef(LeadChefID)
);

DROP TABLE IF EXISTS Recipe_Chef;
CREATE TABLE Recipe_Chef(
RecipeID INTEGER unsigned NOT NULL,
ChefID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID, ChefID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (ChefID) REFERENCES Chef(ChefID)
);

DROP TABLE IF EXISTS Recipe_Student;
CREATE TABLE Recipe_Student(
RecipeID INTEGER unsigned NOT NULL,
StudentID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID, StudentID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (StudentID) REFERENCES Student(StudentID)
);

DROP TABLE IF EXISTS Recipe_Award;
CREATE TABLE Recipe_Award(
RecipeID INTEGER unsigned NOT NULL DEFAULT 0,
AwardID INTEGER unsigned NOT NULL DEFAULT 0,
Date Date NOT NULL,
PRIMARY KEY (RecipeID, AwardID, Date),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (AwardID) REFERENCES Award(AwardID)
);
```

```
DROP TABLE IF EXISTS Recipe_SpecialtyEquipment;
CREATE TABLE Recipe_SpecialtyEquipment(
RecipeID INTEGER unsigned NOT NULL,
EquipmentID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID, EquipmentID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (EquipmentID) REFERENCES SpecialtyEquipment(EquipmentID)
);

DROP TABLE IF EXISTS Recipe_Ingredient;
CREATE TABLE Recipe_Ingredient(
RecipeID INTEGER unsigned NOT NULL,
IngredientID INTEGER unsigned NOT NULL,
Quantity INTEGER default NULL,
PRIMARY KEY (RecipeID, IngredientID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (IngredientID) REFERENCES Ingredient(IngredientID)
);

DROP TABLE IF EXISTS Recipe_Instruction;
CREATE TABLE Recipe_Instruction(
RecipeID INTEGER unsigned NOT NULL,
InstructionStepID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID, InstructionStepID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (InstructionStepID) REFERENCES Instruction(InstructionStepID)
);

DROP TABLE IF EXISTS Recipe_eCookBook;
CREATE TABLE Recipe_eCookBook(
RecipeID INTEGER unsigned NOT NULL,
eCookBookID INTEGER unsigned NOT NULL,
PRIMARY KEY (RecipeID, eCookBookID),
FOREIGN KEY (RecipeID) REFERENCES Recipe(RecipeID),
FOREIGN KEY (eCookBookID) REFERENCES eCookBook(eCookBookID)
);
```

Insert Data Queries(Test Data):

```
INSERT INTO person
(PersonID,Email,FirstName,LastName,StreetAddress,City,State,Zipcode)
 VALUES
(1,"egestas.Duis.ac@rutrumlorem.org","Connor", "English","598-2101
Aliquet, Road","Beaumont","NC","09367"),
(2,"nec@interdumNunc.co.uk","Alvin", "Brennan","P.O. Box 533, 235 Donec
Rd.","Oostkamp","VA","48063"),
(3,"interdum.enim.non@sit.edu","Reece", "Tyler","Ap #591-8904 Ut
Street","Burnaby","TN","468079"),
(4,"lorem.ut.aliquam@cursuspurusNullam.com","Aquila", "Kerr","P.O. Box
852, 7602 Aliquet, Rd.","Neuville","SC","85612"),
(5,"tellus.imperdiet@neque.org","Troy", "Reeves","700-4472 Posuere
Rd.","Attigliano","GA","52343"),
(6,"non.lacinia.at@placerataugueSed.co.uk","Merritt", "Grant","Ap
#498-4861 Urna. St.","Lang","AL","32137"),
(7,"arcu@Donectempuslorem.com","Andrew", "Massey","P.O. Box 105, 778
Laoreet St.","Antalya","NC","82362"),
(8,"dui.Cras.pellentesque@Donecfelisorci.org","Vaughan", "Obrien","P.O.
Box 436, 7616 Enim, Av.","Mörfelden-Walldorf","NC","77918"),
(9,"Aliquam.vulputate@Maecenasornare.ca","Alvin", "Little","Ap 884-6004
Non, Rd.","Maastricht","SC","238663"),
(10,"Mauris.eu@magnisdis.com","Nathan", "Kaufman","Ap 843-2756 Lectus
Street","Cabano","NC","50619"),
(11,"sem.ut.dolor@elitfermentumrisus.edu","Jackson", "Ashley","405-2804
Dolor. Rd.","Radebeul","NC","0899595"),
(12,"lacus@diamatpretium.ca","Reece", "Padilla","Ap 108-3435 Magna
St.","Petrolina","SC","28250"),
(13,"lobortis@rutrum.com","Russell", "Wooten","5849 Et
Rd.","Monmouth","GA","465321"),
(14,"faucibus.leo.in@orciluctuset.co.uk","Jerry", "Hewitt","297-6603
Mauris. St.","Tourinne","TN","96217"),
(15,"lorem.sit@elementumduiquis.edu","Jin", "Gordon","1079 Mus.
St.","Newtown","GA","6870");
INSERT INTO person
(PersonID,Email,FirstName,LastName,StreetAddress,City,State,Zipcode)
VALUES
(16,"eget.ipsum@ac.org","Zephania","Cain","195-1129 Augue. St.","Rodì
Milici","NC","784512"),
(17,"magna@at.com","Lester", "Moses","Ap 144-4594 Tellus.
Rd.","Sinaai-Waas","NC","13036"),
(18,"gravida@consectetuer.ca","Burke", "Riggs","Ap 244-4588 Nec,
Road","Melipilla","SC","2923"),
```

```
(19,"sem.Pellentesque@orci.com","Zeus", "Gallegos","Ap 265-7290 Molestie
Ave","Tywyn","GA","3132"),
(20,"tellus.Aenean.egestas@turpisnec.net","Axel", "Dudley","255-1145 Morbi
Av.","Montgomery","TN","86883306"),
(21,"lacus.Quisque.purus@temporbibendum.org","Zeph", "Rhodes","427 Arcu.
Street","Great Falls","NC","5130"),
(22,"Fusce@tinciduntpede.co.uk","Emerson", "Underwood","Ap 299-963 Gravida
Avenue","Acerra","NC","12195"),
(23,"enim@malesuada.org","Tarik", "Bond","P.O. Box 270, 8255 Mauris
St.","Denbigh","SC","3604534"),
(24,"blandit.Nam.nulla@nequesedsem.co.uk","Brian", "Langley","P.O. Box
623, 4260 Nascetur Av.","Aisén","GA","2014"),
(25,"Donec.tincidunt@sapienmolestieorci.ca","Jermaine",
"Christensen","P.O. Box 751, 7527 Lectus Rd.","Bressoux","GA","698458"),
(26,"euismod@Cras.com","Rafael", "Benson","P.O. Box 610, 1276 Vulputate
Avenue","Whitehaven","TN","60917"),
(27,"quam.elementum@nonluctussit.edu","Bruce", "Hurst","Ap 931-1276 Nulla.
St.","Boston","VA","93045"),
(28,"Morbi.sit@etlacinia.co.uk","Joseph", "Underwood","7986 Ipsum
Rd.","San Donato di Ninea","NC","9336"),
(29,"Curabitur@Donecnibh.net","Zachery", "Sexton","586 Molestie
Avenue","Lowell","VA","86275"),
(30,"euismod.mauris@Crasconvallisconvallis.net","Clarke", "Kramer","Ap
653-4118 Iaculis Avenue","Castel Giorgio","VA","2629");
INSERT INTO person
(PersonID,Email,FirstName,LastName,StreetAddress,City,State,Zipcode)
VALUES
(31,"velit.Pellentesque.ultricies@ametmassa.edu","Zeus","Carrillo","Ap
231-6600 Eget Av.","Nurallao","NC","456321"),
(32,"lectus.rutrum@amet.edu","Curran", "Carlson","P.O. Box 289, 1527 Dui,
Ave","Melle","NC","8022"),
(33,"ut.nisi@Donecfelis.edu","Julian", "Noble","728-1852 Risus.
Rd.","Zaragoza","TN","29479"),
(34,"dui.Cras@congue.co.uk","Galvin", "Washington","P.O. Box 458, 2438
Ligula. Rd.","Joliet","SC","79863"),
(35,"ut@mipedenonummy.co.uk","Addison", "Farmer","7751 Nisi
Rd.","Zonhoven","VA","042207"),
(36,"non.enim.Mauris@fringilla.net","Gareth", "Reese","P.O. Box 994, 3155
Et Road","Albano di Lucania","NC","52804"),
(37,"sem.Nulla.interdum@semutdolor.co.uk","Martin", "Wall","P.O. Box 189,
6959 Non, Av.","Vilna","VA","40832"),
(38,"Maecenas.ornare@sapienimperdietornare.edu","Hyatt", "Justice","Ap
747-2278 Eu Rd.","Massello","NC","105165"),
(39,"tellus@molestie.com","Jerome", "Mendez","Ap 711-9315 Et,
St.","Dalcahue","SC","69649"),
```

```
(40,"quis@euneque.net","Lane", "Trevino","5511 Nascetur
St.","Alwar","NC","66405"),
(41,"eu.enim@adipiscingelit.org","Rudyard", "Montgomery","P.O. Box 298,
5379 Eget, Av.","Arquata del Tronto","TN","10619"),
(42,"fringilla.porttitor@egestasblanditNam.org","Fitzgerald",
"Ellis","3299 Elementum Road","Ilkeston","GA","2233598"),
(43,"dolor@magna.net","Murphy", "Wiley","Ap 423-5099 Laoreet,
Rd.","Hamoir","VA","456321"),
(44,"aliquet@Fuscefeugiat.edu","Zephania", "Wallace","783-5420 Ut
Rd.","Roccamena","SC","63264"),
(45,"at.sem@temporaugueac.com","Simon", "Ramirez","753-8739 Ullamcorper,
St.","Dégelis","NC","54239");
```

```
INSERT INTO Chef (Specialty,Salary,FKPersonID)
VALUES
("Lamb",45000,1),
("Filet Mignon",62000,2),
("Chicken",45000,3),
("Fish",56000,4),
("Steak",60000,5),
("Pasta",4500,6),
("Hibachi",40000,7),
("Desert",39000,8),
("Noodles",35000,9),
("Cake",40000,10),
("Ribs",45000,11),
("Salmon",47000,12),
("Stirfry",40000,13),
("Sandwich",35000,14),
("Pork",45000,15);
```

```
INSERT INTO Student (Major, ExpectedGraduationDate, FKPersonID)
VALUES
("Fish","2020-06-28",15),
("Dessert", "2021-06-28",16),
("Pasta", "2020-12-28",17),
("Meat", "2019-12-28",18),
("Fish", "2020-06-28",19),
("Meat", "2020-12-28",20),
("Pasta", "2021-06-28",21),
```

("Dessert", "2021-12-28",22),
("Dessert", "2021-12-28",23),
("Dessert", "2020-06-28",24),
("Dessert", "2020-06-28",25),
("Meat", "2019-12-28",26),
("Meat", "2019-12-28",27),
("Meat", "2020-06-28",28),
("Meat", "2020-06-28",29),
("Meat", "2021-06-28",30),
("Meat", "2021-06-28",31),
("Fish", "2022-06-28",32),
("Fish", "2020-06-28",33),
("Fish", "2020-06-28",34),
("Fish", "2020-06-28",35),
("Fish", "2020-06-28",36),
("Pasta", "2020-06-28",37),
("Pasta", "2020-06-28",38),
("Pasta", "2020-06-28",39),
("Pasta", "2020-12-28",40),
("Dessert", "2021-12-28",41),
("Meat", "2021-12-28",41),
("Fish", "2022-06-28",42),
("Pasta", "2022-06-28",43),
("Pasta", "2022-06-28",44),
("Pasta", "2022-06-28",45);

INSERT INTO recipe (RecipeID, Name, Downloads, PublicationDate, Category, Cuisine, NumberServed) VALUES
("1", "bacon burger","15782", "2020-10-23", "Burger", "American", 1),
("2", "falafel gyro","651", "2020-01-01","Pita", "mediterranean", 1),
("3", "pad thai","78912", "2019-10-14","Noodles", "thai", 2),
("4", "bbq sandwich","12688", "2019-12-08","BBQ", "American", 1),
("5", "fried chicken","789654", "2019-07-22", "Chicken", "American", 2),
("6", "teriyaki wings","456", "2019-11-06", "Wings", "American", 2),
("7", "spinach dip","24862", "2019-04-25","Veggies", "American", 4),
("8", "fruit smoothie","98561", "2020-06-09", "Fruit", "American", 1),
("9", "Chicken noodle soup","7895", "2019-03-08","Soup", "American", 3),
("10", "Sub Sandwich","14526", "2020-11-02","Sandwich", "American", 1),
("11", "Coconut Curry", "275", "2006-12-8", "Spicy", "Indian", 2),
("12", "Chocolate Pie", "12548", "2012-5-7", "Dessert", "American", 4),
("13", "Fried Rice Stir Fry", 275, "2009-1-18", "Rice", "Chinese", 6),
("14", "Caesar Salad", 275, "2016-9-4", "Salad", "American", 4),
("15", "Cheesy Calzone", 275, "2033-6-7", "Calzone", "italian", 2),
("16", "Deep Dish", 275, "201-5-30", "Pizza", "italian", 8),

```
("17", "Apples & Caramel", 275, "2014-11-9", "Snack", "American", 1),
("18", "Mac and Cheese", 275, "2015-7-25", "Sides", "American", 6),
("19", "Rainbow Roll", 275, "2018-2-25", "Sushi", "japanese", 3),
("20", "Nachos", 275, "2019-11-15", "Chip", "Mexican", 2);
```

```
INSERT INTO DevelopmentProject(Name)
Values
("Cake"),
("Pot Roast"),
("Pork Chop"),
("Steak"),
("Ribs"),
("Pasta Salad"),
("Salmon"),
("Meat loaf"),
("Fudge"),
("Cake Pops"),
("SwordFish"),
("Lobster"),
("Crab Legs"),
("Mussels"),
("Sausage"),
("Chicken Pot Pie"),
("Beef Stew"),
("Cupcakes"),
("Ice Cream"),
("Brownies"),
("Shrimp Scampi");
```

```
INSERT INTO eCookBook (NumberOfRecipes,Theme,Name)
VALUES
(3,"Dessert", "Simple Desserts"),
(4,"Pasta", "Simple Pasta"),
(4, "Meat", "Tasty Meat"),
(2,"Fish", "Easy Fish");
```

```
INSERT INTO SpecialtyEquipment (Name)
Value
("cast iron pan"),
("Blender"),
("Grill"),
("Brush"),
("Bag"),
("Mixer"),
("Spatula"),
("Skillet"),
("Pressure Cooker"),
("Large Pot");


INSERT INTO Award (Name)
VALUES
("Best Taste"),
("Prettiest Presentation"),
("Best Flavor"),
("Most Healthy"),
("Most Creative"),
( "Greatest use of Spices"),
("Best Looking"),
("Quickest Prep"),
("Best Colors"),
("Most Inspired");


INSERT INTO Recipe_Award (RecipeID,AwardID,Date)
Values
(13,1,"2020-10-23"),
(2,3,"2020-01-01"),
(3,2,"2019-10-14"),
(4,5,"2019-12-08"),
(15,4,"2019-07-22"),
(6,7,"2019-11-06"),
(7,6,"2019-04-25"),
(8,9,"2020-06-09"),
(13,1,"2019-03-08"),
(9,8,"2018-04-22"),
(13,10,"2020-11-02");
```

```
INSERT INTO Instruction (Instruction)
VALUE
("Crack an egg."),
("Empty contents of egg into skillet."),
("Allow time to pass."),
("Eat egg."),
("non, dapibus rutrum, justo. Praesent luctus."),
("Curabitur egestas nunc sed"),
("quis, tristique ac, eleifend vitae, erat. Vivamus nisi. Mauris nulla."),
("dolor. Nulla semper tellus id nunc interdum feugiat."),
("dictum cursus. Nunc mauris elit, dictum eu, eleifend nec, malesuada"),
("Vivamus sit amet risus. Donec egestas. Aliquam nec enim. Nunc"),
("lectus. Cum sociis natoque penatibus et magnis dis parturient montes,"),
("ut lacus. Nulla tincidunt, neque vitae semper egestas, urna justo"),
("justo sit amet nulla. Donec non justo. Proin non massa"),
("interdum ligula eu enim. Etiam imperdiet dictum magna. Ut tincidunt"),
("libero est, congue a, aliquet vel, vulputate eu, odio. Phasellus"),
("fames ac turpis egestas. Aliquam fringilla cursus purus. Nullam
scelerisque"),
("sagittis lobortis mauris. Suspendisse aliquet molestie tellus. Aenean
egestas hendrerit"),
("vitae odio sagittis semper. Nam tempor diam dictum sapien. Aenean"),
("sapien, cursus in, hendrerit consectetuer, cursus et, magna. Praesent
interdum"),
("in consequat enim diam vel arcu. Curabitur ut odio vel"),
("Maecenas ornare egestas ligula. Nullam feugiat placerat velit. Quisque
varius."),
("sed dolor. Fusce mi lorem, vehicula et, rutrum eu, ultrices"),
("at lacus. Quisque purus sapien, gravida non, sollicitudin a,
malesuada"),
("sed turpis nec mauris blandit mattis. Cras eget nisi dictum"),
("luctus. Curabitur egestas nunc sed libero. Proin sed turpis nec");
```

```
INSERT INTO Ingredient (Units, Name)
VALUES
("Ounces", "Chicken"),("Ounces", "Steak"),("Ounces","Salmon"),
("Whole","Egg"),("Cups", "Rice"),("Teaspoons", "Garlic"),
("Cups", "Peanuts"),("Cups", "Noodles"),("Cups", "Beans"),
("Whole", "Tomato");
INSERT INTO Ingredient(Units,Name)
VALUES
("Teaspoons","Salt"),
("Cups","Cheese"),
("Teaspoons","Pepper"),
("Whole","Buns"),
("Whole","Bacon"),
("Ounces","Hamburger"),
("Whole","Pita Roll"),
("Cups","Shredded Lettuce"),
("Cups","Onion"),
("Cups","Thai Noodles"),
("Cups","Thai Sauce"),
("Cups", "Green Pepper"),
("Ounces","Pork"),
("Cups","Barbecue Sauce"),
("Cups","Milk"),
("Cups","Flour"),
("Whole","Chicken Wings"),
("Teaspoon","Sugar"),
("Cups","Spinach"),
("Teaspoons","Spice"),
("Whole","Apple"),
("Whole","Banana"),
("Cups","Chicken Broth"),
("Cups","Carrots"),
("Whole","Sub Roll"),
("Cups","Ham"),
("Cups","Turkey"),
("Whole","Coconut"),
("Teaspoon","Curry Sauce"),
("Cups","Coconut Milk"),
("Whole","Pizza Dough"),
("Cups","Caramel"),
("Cups", "Elbow Pasta"),
("Cups","Nacho Chips");
```

```
INSERT INTO Recipe_Chef (RecipeID,ChefID)
Values
(1,15),(2,14),(3,13),(4,12),
(5,11),(6,10),(7,9),(8,7),
(9,8),(10,6),(11,5),
(12,4),(13,3),
(14,2),(15,1),(1,10),(1,3),
(1,13),(2,3),(2,4),(3,3),(16,1),(16,4),(17,9),(18,10),(19,15),(20,7);



INSERT INTO Recipe_eCookBook(eCookBookID,RecipeID)
VALUES
(1,8),(1,12),(1,17),(2,3),(2,9),(2,15),(2,18),(3,4),(3,5),(3,6),(3,1),(4,1
9),(4,2);

INSERT INTO Recipe_Ingredient(RecipeID,IngredientID,Quantity)
VALUES
(1,11,1),(1,13,1),(1,4,1),(1,16,8),
(1,14,1),(2,11,1),(2,13,1),(2,6,1),
(2,1,8),(2,17,1),(3,11,1),(3,13,1),
(3,21,1),(3,20,2),(3,19,1),(4,23,16),
(4,13,1),(4,14,1),(4,24,1),(4,11,1),(5,1,16),(5,6,1),(5,13,1),(5,12,1),(5,
26,1),(6,27,6),(6,13,1),(6,11,1),(6,30,1),(6,24,1),(7,29,1),(7,12,1),(7,13
,1),(7,11,1),(7,18,1),(8,28,2),(8,25,1),(8,31,1),(8,32,1),(8,34,1),(9,1,6)
,(9,33,1),(9,13,1),(9,11,1),(9,8,1),(10,35,1),(10,10,1),(10,41,1),(10,12,1
),(10,6,1);

INSERT INTO Recipe_Ingredient(RecipeID,IngredientID,Quantity)
VALUES
(11,30,1),(11,40,1),(11,39,1),(11,11,1),(11,13,1),
(12,42,1),(12,26,1),
(12,28,2),(12,4,1),(12,25,1),(13,9,1),(13,5,1),
(13,18,1),(13,22,1),(13,30,1),(14,18,1),(14,10,1),(14,13,1),
(14,11,1),(14,12,1),(15,36,4),(15,12,1),(15,41,1),
(15,19,1),(15,37,10),(16,41,1),
(16,12,1),(16,19,1),(16,10,1),(16,6,1),(17,31,1),(17,42,1),
(17,28,1),(17,25,1),(17,7,1),
(18,43,1),(18,12,1),
(18,25,1),(18,11,1),(18,15,2),(19,3,8),
(19,5,1),(19,12,1),(19,11,1),(19,13,1),
(20,44,1),(20,12,1),(20,22,1),(20,19,1),(20,18,1);
```

```
INSERT INTO Recipe_Instruction(RecipeID,InstructionStepID)
Values
(1,1),(1,2),(1,3),(1,4),(2,5),(3,6),
(4,7),(5,8),(6,9),(7,10),(8,11),
(9,12),(10,13),(11,14),(12,15),
(13,16),(14,17),(15,18),
(16,19),(17,20),(18,21),(19,22),(20,23),(20,24);

INSERT INTO Recipe_SpecialtyEquipment(RecipeID,EquipmentID)
VALUES
(1,1),(7,2),(8,2),(11,2),(1,3),(4,3),(6,3),
(17,4),(6,4),(5,5),(12,6),(13,7),
(18,7),(11,8),(13,8),(3,8),(9,9),(18,10),(19,10),(20,10);

INSERT INTO LeadChef(FKLeadChefID)
VALUES
(3),(10),(3),(13),
(12),(11),(10),(9),
(7),(8),(6),(5),(4),(3),
(2),(1),(1),(9),(10),
(15),(7);

INSERT INTO Recipe_LeadChef(RecipeID,LeadChefID)
VALUES
(1,1),(2,2),(3,3),(4,4),
(5,5),(6,6),
(7,7),(8,8),
(9,9),(10,10),(11,11),
(12,12),(13,13),
(14,14),(15,15),
(16,16),(17,17),
(18,18),(19,19),(20,20);

INSERT INTO Recipe_Student(RecipeID,StudentID)
Values
(13,27),(19,31),(17,23),(11,16),(16,30),(2,15),(10,1),(16,22),(8,10),(5,1)
,(4,3),(6,4),
(9,13),(14,16),(5,15),(17,7),(14,19),(7,13),(18,32),(7,1),(7,15),(7,16),(1
7,14),
(10,15),(1,8),(12,2),(6,18),(4,28),(14,15),(3,10),(7,3),(5,29),(5,20),(5,5
),(13,21),(15,26),(1,21),(19,26),(6,1),(5,27),(12,28),(1,1),(9,15),(9,9),(
9,32),
(4,18),(16,7),(4,20),(7,27),(3,30),(15,31),(16,19),(18,21),(15,17),(13,11)
,(3,22),(5,31),(18,14),
```

```
(10,10),(4,1),(10,23),(12,11),(5,24),(5,9),(5,16),(7,18),(6,23),(11,11),(8
,30),(16,4),(12,24),
(14,14),(9,27),(19,16),(18,31),(16,6),(17,1),(10,3),(11,9),(4,21),(9,14),(
3,28),(2,11),(8,17),(16,5),
(4,2),(10,5),(8,3),(17,28),(1,12),(8,29),(13,24),(7,12);


INSERT INTO Chef_DevelopmentProject(ChefID,ProjectID)
 Values

(12,11),(12,10),(12,20),(3,7),(1,16),(12,16),(14,17),(11,15),(7,5),(6,13),
 (9,6),(3,12),(2,5),(1,15),(4,1),(11,13),(9,12),(2,3),(5,6),(6,19),(13,4),
 (11,20),(9,2),(14,18),(5,8),(2,9),(10,14),(7,8),(2,2);



INSERT INTO LeadChef_DevelopmentProject(LeadChefID, ProjectID)
Values
(4,1),(2,2),(2,3),(13,4),(7,5),(5,6),
(3,7),(5,8),(2,9),(12,10),
(9,12),(6,13),(10,14),(1,15),
(11,15),(12,16),(14,17),
(6,19),(11,20);

INSERT INTO Student_DevelopmentProject(StudentID,ProjectID)
VALUES
(24,2),(31,4),(13,12),(19,6),(13,11),(22,18),(5,9),(31,3),(13,9),(12,19),(
1,13),
(6,10),(25,4),(19,7),(32,12),(2,16),(5,7),(7,19),(20,1),(22,4),(9,9),(25,1
7),(1,16),
(21,7),(7,1),(15,12),(28,11),(3,7),(5,16),(1,7),(2,15),(18,10),(23,13),(16
,8),(6,2),(17,19),
(17,17),(15,7),(20,8),(29,14),(21,17),(10,16),(21,18),(4,17),(18,19),(8,5)
,(30,19),
(9,8),(20,18),(7,9),(7,14),(25,10),(5,1),(30,1),(30,3),(20,17),(27,13),(12
,16),
(11,15),(21,5),(16,10),(8,9),(17,15),(29,6),(14,5),(24,9),(5,2),(12,3),(21
,4),(28,4),(8,13),
(14,19),(21,10),(8,1),(31,16),(8,12),(28,2),(9,17),(28,14),(7,4),(26,9),(1
6,6),
(2,2),(9,3),(22,1),(21,6),(5,5),(28,1),(14,4),(16,18),(26,8);
```

Report Queries

Chef Reports:

a) Listing unpublished recipe projects by lead chef

chef | chef | person | developmentproject | leadchef | leadchef_developmentproject | developmentproject

Limit to 1000 rows

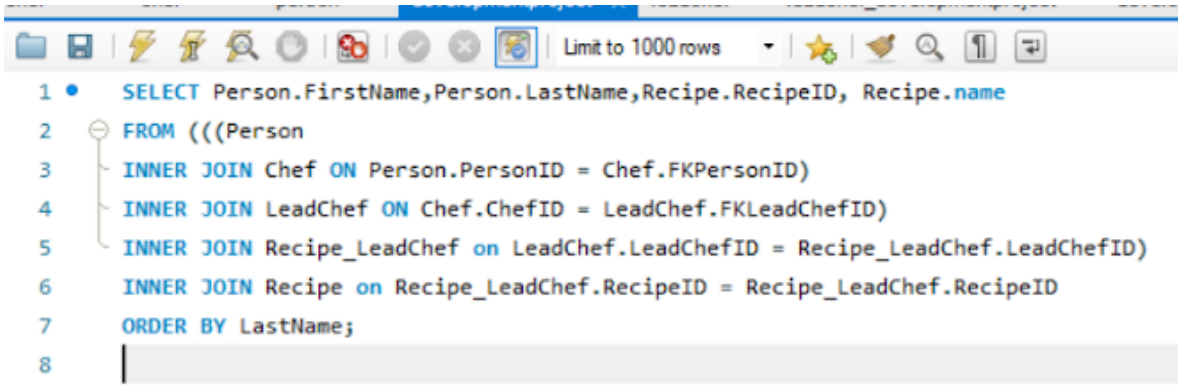
```
1  SELECT Person.FirstName,Person.LastName,DevelopmentProject.ProjectID, DevelopmentProject.name
2  FROM (((Person
3  INNER JOIN Chef ON Person.PersonID = Chef.FKPersonID)
4  INNER JOIN LeadChef ON Chef.ChefID = LeadChef.FKLeadChefID)
5  INNER JOIN LeadChef_DevelopmentProject on LeadChef.LeadChefID = LeadChef_DevelopmentProject.LeadChefID)
6  INNER JOIN DevelopmentProject on LeadChef_DevelopmentProject.ProjectID = DevelopmentProject.ProjectID
7  ORDER BY LastName;
8
```

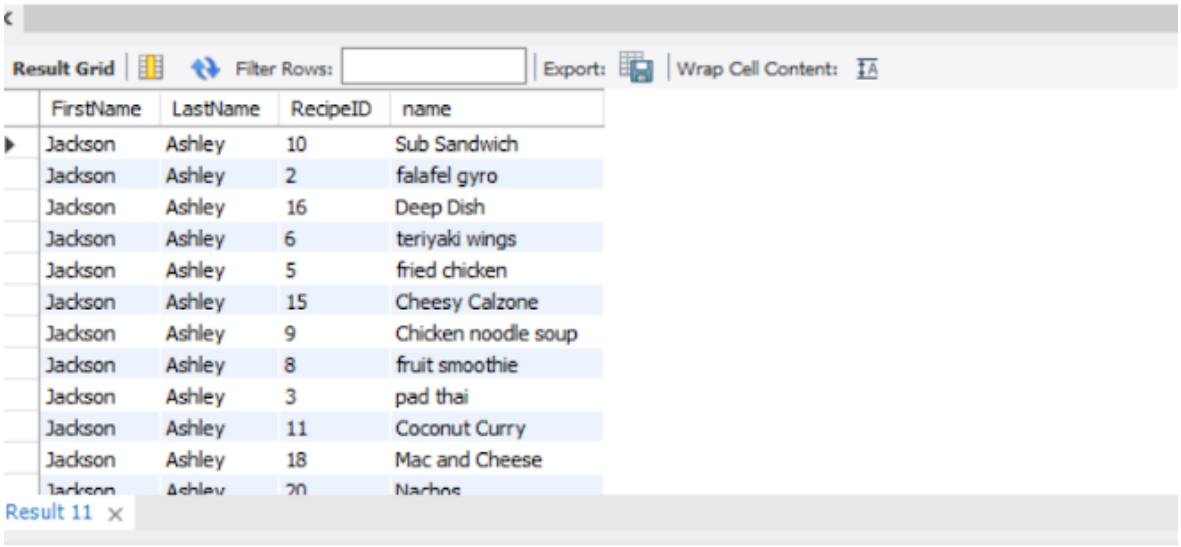
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

FirstName	LastName	ProjectID	name
Jackson	Ashley	13	Crab Legs
Jackson	Ashley	19	Ice Cream
Merritt	Grant	15	Sausage
Merritt	Grant	20	Brownies
Nathan	Kaufman	2	Pot Roast
Nathan	Kaufman	3	Pork Chop
Nathan	Kaufman	9	Fudge
Nathan	Kaufman	5	Ribs
Aquila	Kerr	4	Steak
Andrew	Massey	12	Lobster
Vaughan	Obrien	14	Mussels
Reece	Padilla	6	Pasta Salad

Result 10

b) Listing published recipe projects by Lead chef





FirstName	LastName	RecipeID	name
Jackson	Ashley	10	Sub Sandwich
Jackson	Ashley	2	falafel gyro
Jackson	Ashley	16	Deep Dish
Jackson	Ashley	6	teriyaki wings
Jackson	Ashley	5	fried chicken
Jackson	Ashley	15	Cheesy Calzone
Jackson	Ashley	9	Chicken noodle soup
Jackson	Ashley	8	fruit smoothie
Jackson	Ashley	3	pad thai
Jackson	Ashley	11	Coconut Curry
Jackson	Ashley	18	Mac and Cheese
Jackson	Ashley	20	Nachos

c) Listing all recipe projects and included assigned chefs

```
1  SELECT Person.FirstName,Person.LastName,Recipe.RecipeID,Recipe.Name,DevelopmentProject.ProjectID, DevelopmentProject.Name
2  FROM ((((Person
3  INNER JOIN Chef ON Person.PersonID = Chef.FKPersonID)
4  INNER JOIN Recipe_Chef ON Chef.ChefID = Recipe_Chef.ChefID)
5  INNER JOIN Recipe ON Recipe_Chef.RecipeID = Recipe.RecipeID)
6  INNER JOIN Chef_DevelopmentProject ON Chef.ChefID = Chef_DevelopmentProject.ChefID)
7  INNER JOIN DevelopmentProject ON Chef_DevelopmentProject.ProjectID = DevelopmentProject.ProjectID
8  ORDER BY LASTNAME;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

FirstName	LastName	RecipeID	Name	ProjectID	Name
Jackson	Ashley	5	fried chicken	20	Brownies
Jackson	Ashley	5	fried chicken	15	Sausage
Jackson	Ashley	5	fried chicken	13	Crab Legs
Alvin	Brennan	14	Caesar Salad	3	Pork Chop
Alvin	Brennan	14	Caesar Salad	2	Pot Roast
Alvin	Brennan	14	Caesar Salad	5	Ribs
Alvin	Brennan	14	Caesar Salad	9	Fudge
Connor	English	16	Deep Dish	15	Sausage
Connor	English	15	Cheesy Calzone	16	Chicken Pot Pie
Connor	English	16	Deep Dish	16	Chicken Pot Pie
Connor	English	15	Cheesy Calzone	15	Sausage
Merritt	Grant	10	Sub Sandwich	13	Crab Legs

Result 7

Student Report:

a) Listing all students and their published recipe projects with assigned chefs.

leadchef | recipe_chef | chef_developmentproject

Limit to 1000 rows

```
1  SELECT Person.FirstName,Person.LastName,Student.StudentID,Recipe.Name,Recipe_Chef.ChefID
2  FROM (((Person
3  INNER JOIN Student ON Person.PersonID = Student.FKPersonID)
4  INNER JOIN Recipe_Student ON Student.StudentID = Recipe_Student.StudentID)
5  INNER JOIN Recipe ON Recipe_Student.RecipeID = Recipe.RecipeID)
6  INNER JOIN Recipe_Chef On Recipe.RecipeID = Recipe_Chef.RecipeID
7  ORDER BY LASTNAME;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

FirstName	LastName	StudentID	Name	ChefID
Rafael	Benson	12	bacon burger	3
Rafael	Benson	12	bacon burger	10
Rafael	Benson	12	bacon burger	13
Rafael	Benson	12	bacon burger	15
Rafael	Benson	12	spinach dip	9
Tarik	Bond	9	Coconut Curry	5
Tarik	Bond	9	Chicken noodle soup	8
Tarik	Bond	9	fried chicken	11
Zephania	Cain	2	Chocolate Pie	4
Zephania	Cain	2	bbq sandwich	12
Curran	Carlson	18	spinach dip	9
Curran	Carlson	18	bbq sandwich	12

Result 11

Management Report:

a) Listing all chefs including names and salaries.

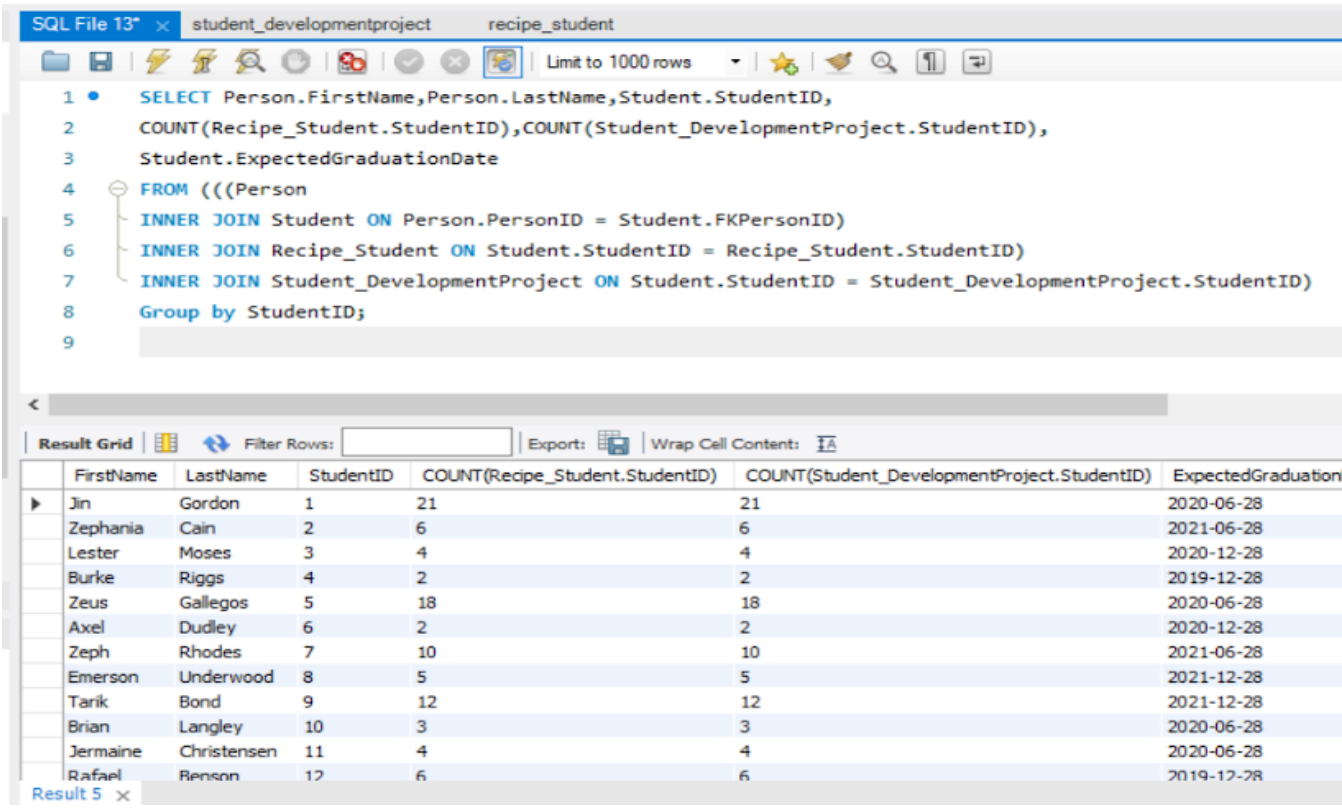
```
1    SELECT Person.FirstName,Person.LastName,Chef.Salary
2    From Chef
3    INNER JOIN Person
4    ON Chef.FKPersonID = Person.PersonID;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Con

FirstName	LastName	Salary
Connor	English	45000
Alvin	Brennan	62000
Reece	Tyler	45000
Aquila	Kerr	56000
Troy	Reeves	60000
Merritt	Grant	4500
Andrew	Massey	40000
Vaughan	Obrien	39000
Alvin	Little	35000
Nathan	Kaufman	40000
Jackson	Ashley	45000

Result 3

b) Listing all students with names, a count of assigned projects, unpublished recipe projects, and expected graduation date.



FirstName	LastName	StudentID	COUNT(Recipe_Student.StudentID)	COUNT(Student_DevelopmentProject.StudentID)	ExpectedGraduation
Jin	Gordon	1	21	21	2020-06-28
Zephania	Cain	2	6	6	2021-06-28
Lester	Moses	3	4	4	2020-12-28
Burke	Riggs	4	2	2	2019-12-28
Zeus	Gallegos	5	18	18	2020-06-28
Axel	Dudley	6	2	2	2020-12-28
Zeph	Rhodes	7	10	10	2021-06-28
Emerson	Underwood	8	5	5	2021-12-28
Tarik	Bond	9	12	12	2021-12-28
Brian	Langley	10	3	3	2020-06-28
Jermaine	Christensen	11	4	4	2020-06-28
Rafael	Benson	12	6	6	2019-12-28

Recipes and eCookBooks:

a) List each recipe with recipe name, lead chef, and number of times downloaded.

leadchef | recipe_chef | chef_developmentproject | student | recipe

Limit to 1000 rows

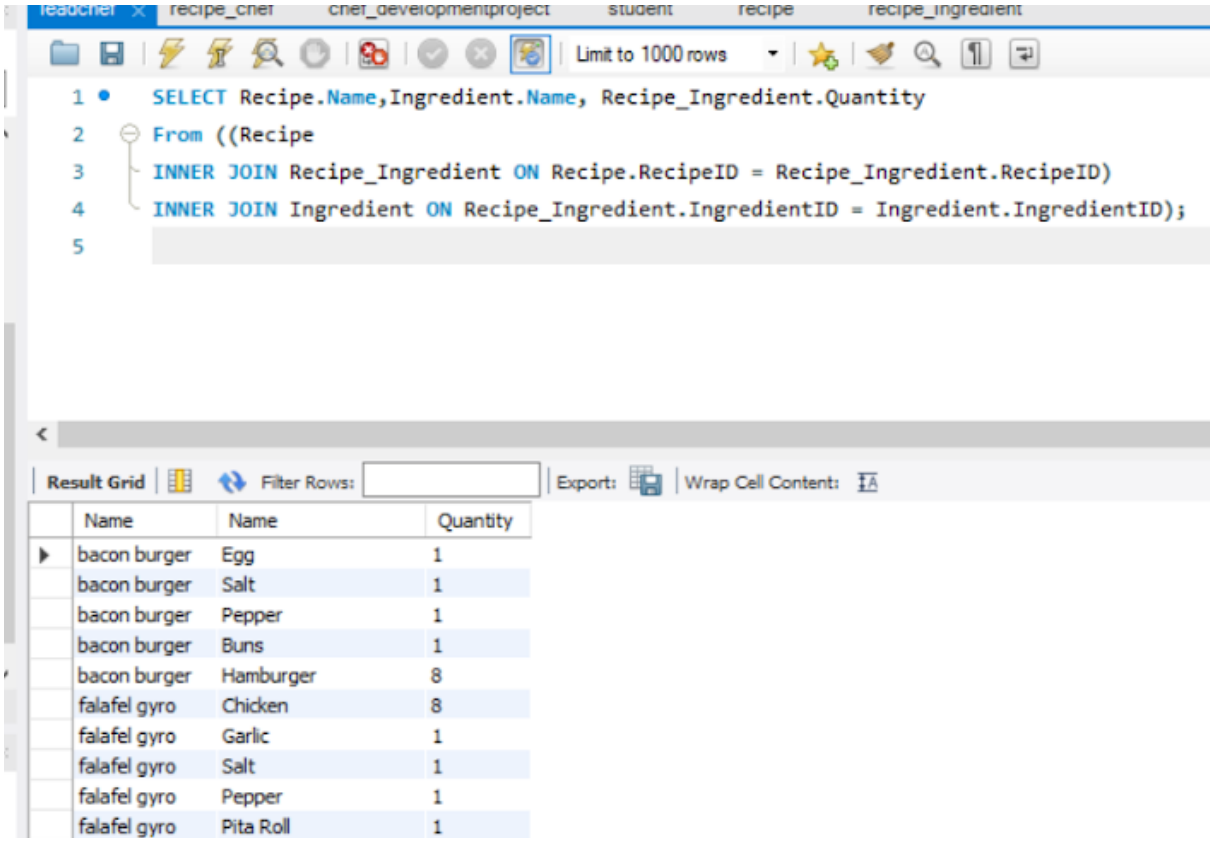
```
1  SELECT Recipe.Name, Person.FirstName, Person.LastName, Recipe_LeadChef.LeadChefID,Recipe.Downloads
2  From ((((Person
3  INNER JOIN Chef ON Person.PersonID = Chef.FKPersonID)
4  INNER JOIN LeadChef ON Chef.ChefID = LeadChef.FKLeadChefID)
5  INNER JOIN Recipe_LeadChef on LeadChef.LeadChefID = Recipe_LeadChef.LeadChefID)
6  INNER JOIN Recipe on Recipe_LeadChef.RecipeID = Recipe_LeadChef.RecipeID);
7
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	FirstName	LastName	LeadChefID	Downloads
bacon burger	Reece	Tyler	1	15782
bacon burger	Nathan	Kaufman	2	15782
bacon burger	Reece	Tyler	3	15782
bacon burger	Russell	Wooten	4	15782
bacon burger	Reece	Padilla	5	15782
bacon burger	Jackson	Ashley	6	15782
bacon burger	Nathan	Kaufman	7	15782
bacon burger	Alvin	Little	8	15782
bacon burger	Andrew	Massey	9	15782
bacon burger	Vaughan	Obrien	10	15782
bacon burger	Merritt	Grant	11	15782
bacon burger	Troy	Reeves	12	15782
bacon burger	Aquila	Kerr	13	15782

Result 3

b) List each recipe name with its ingredients. Include Quantity and Units.



Name	Name	Quantity
bacon burger	Egg	1
bacon burger	Salt	1
bacon burger	Pepper	1
bacon burger	Buns	1
bacon burger	Hamburger	8
falafel gyro	Chicken	8
falafel gyro	Garlic	1
falafel gyro	Salt	1
falafel gyro	Pepper	1
falafel gyro	Pita Roll	1

c) List each recipe name with its instructions.

leadchef | recipe_chef | chef_developmentproject | student | recipe | recipe_ingredient | instruction | recipe_instruction

Limit to 1000 rows

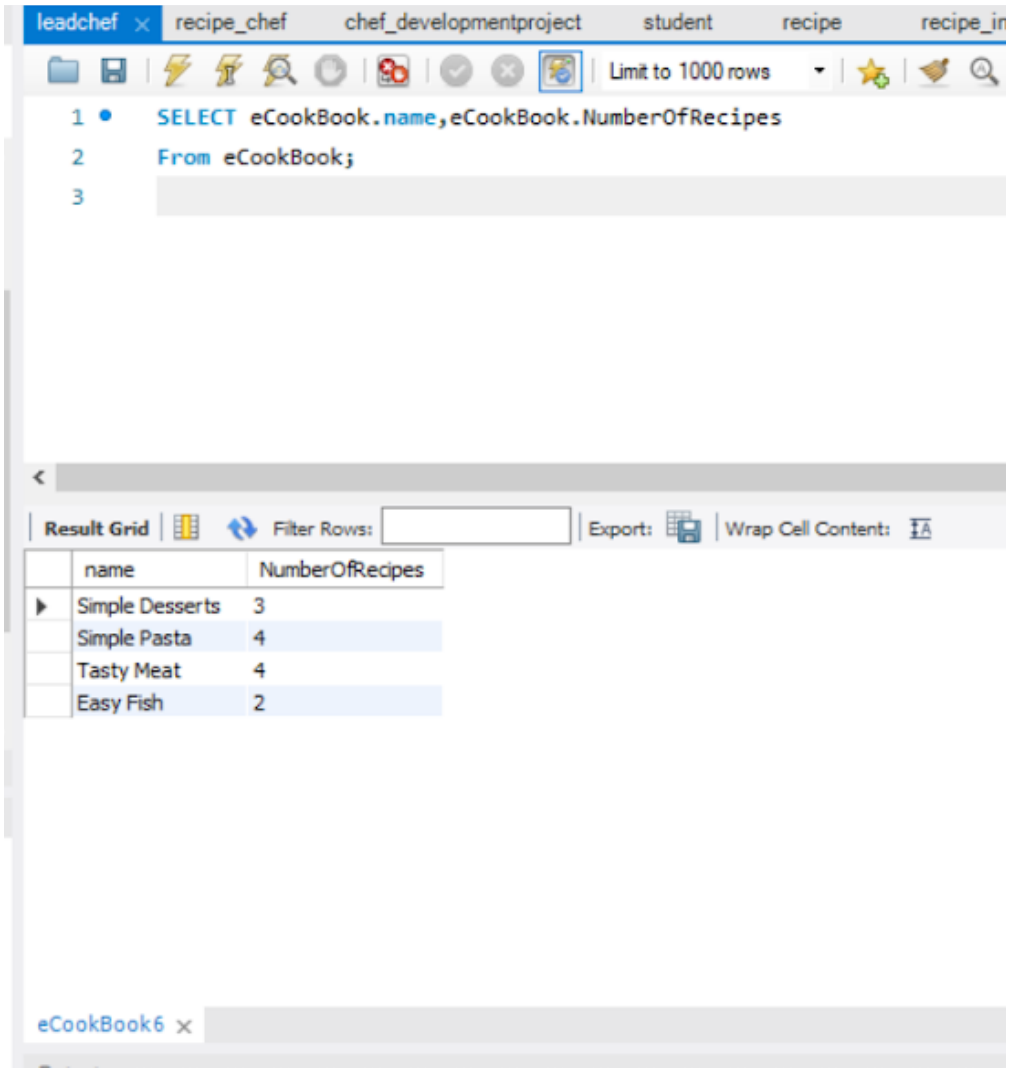
```
1  SELECT Recipe.Name,Instruction.InstructionStepID,Instruction.Instruction
2  From ((Recipe
3  INNER JOIN Recipe_Instruction ON Recipe.RecipeID = Recipe_Instruction.RecipeID)
4  INNER JOIN Instruction ON Recipe_Instruction.InstructionStepID = Instruction.InstructionStepID);
5
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Name	InstructionStepID	Instruction
bacon burger	1	Crack an egg.
bacon burger	2	Empty contents of egg into skillet.
bacon burger	3	Allow time to pass.
bacon burger	4	Eat egg.
falafel gyro	5	non, dapibus rutrum, justo. Praesent luctus.
pad thai	6	Curabitur egestas nunc sed
bbq sandwich	7	quis, tristique ac, eleifend vitae, erat. Vivamus ...
fried chicken	8	dolor. Nulla semper tellus id nunc interdum feugi...
teriyaki wings	9	dictum cursus. Nunc mauris elit, dictum eu, eleif...
spinach dip	10	Vivamus sit amet risus. Donec egestas. Aliquam ...
fruit smoothie	11	lectus. Cum sociis natoque penatibus et magnis ...
Chicken noo...	12	ut lacus. Nulla tincidunt, neque vitae semper eg...
Sub Sandwich	13	justo sit amet nulla. Donec non justo. Proin non ...

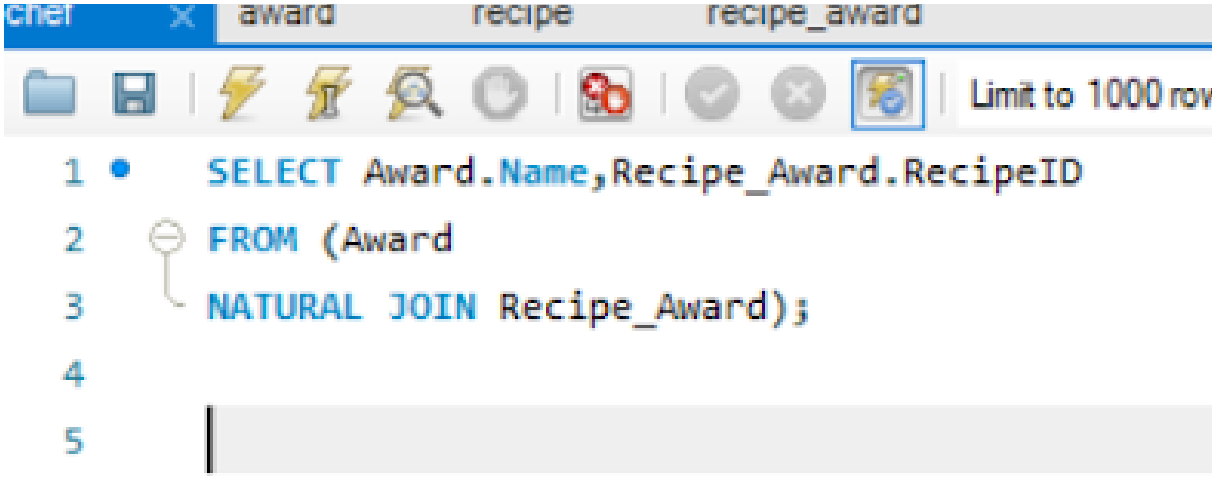
Result 5

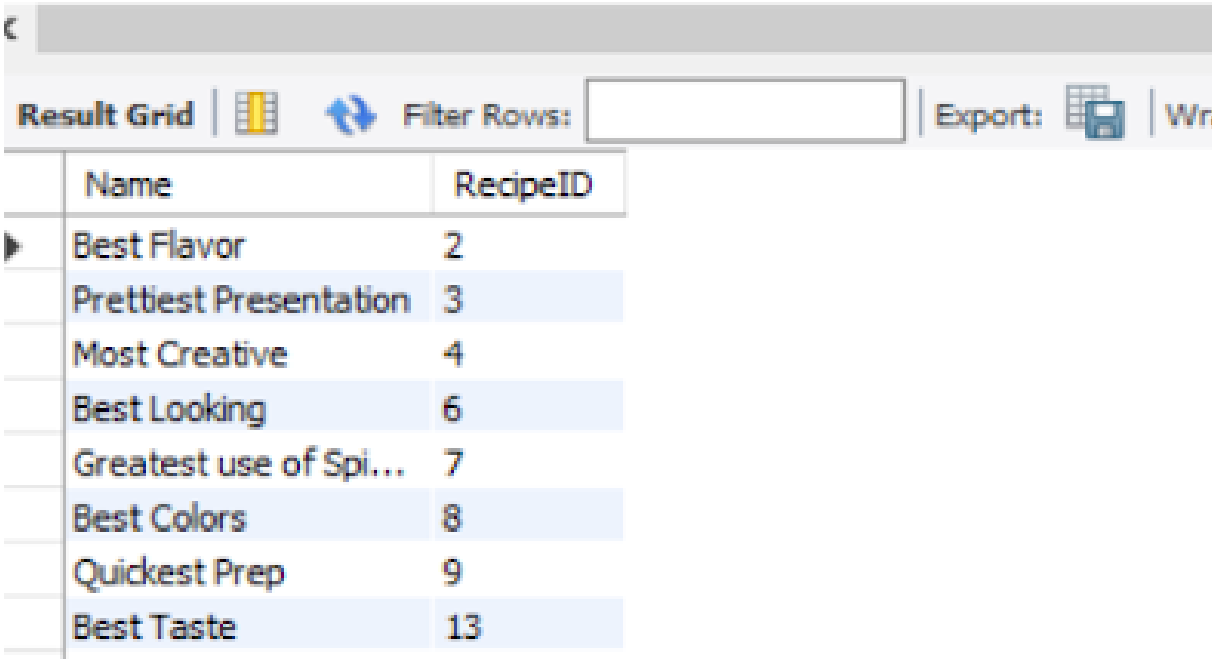
d) List each eCookBook with eCookBook name and number of recipes in it.



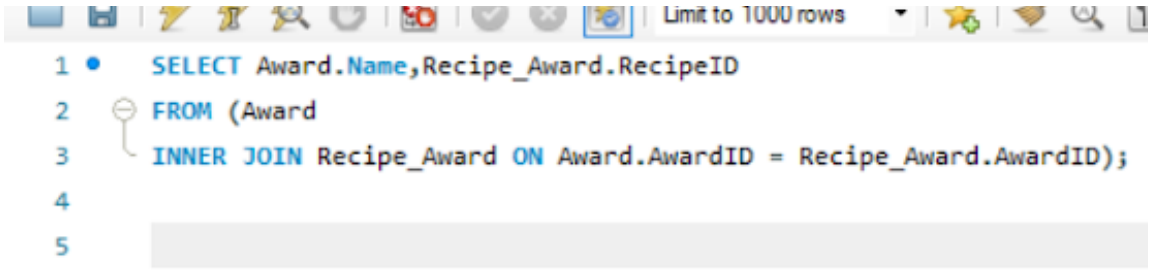
Awards:

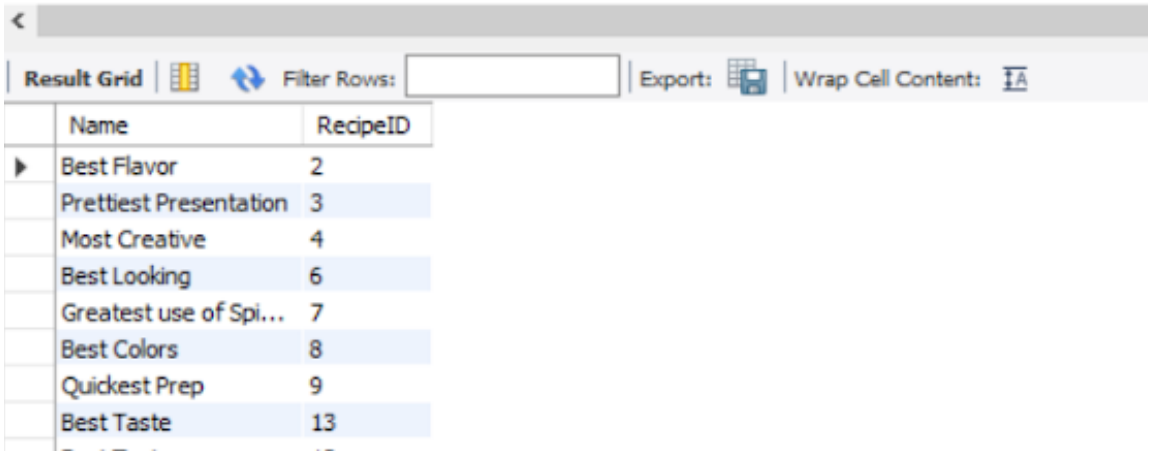
a)List all recipes that have received awards including the name of the award. Once with a natural join and once with a join statement.





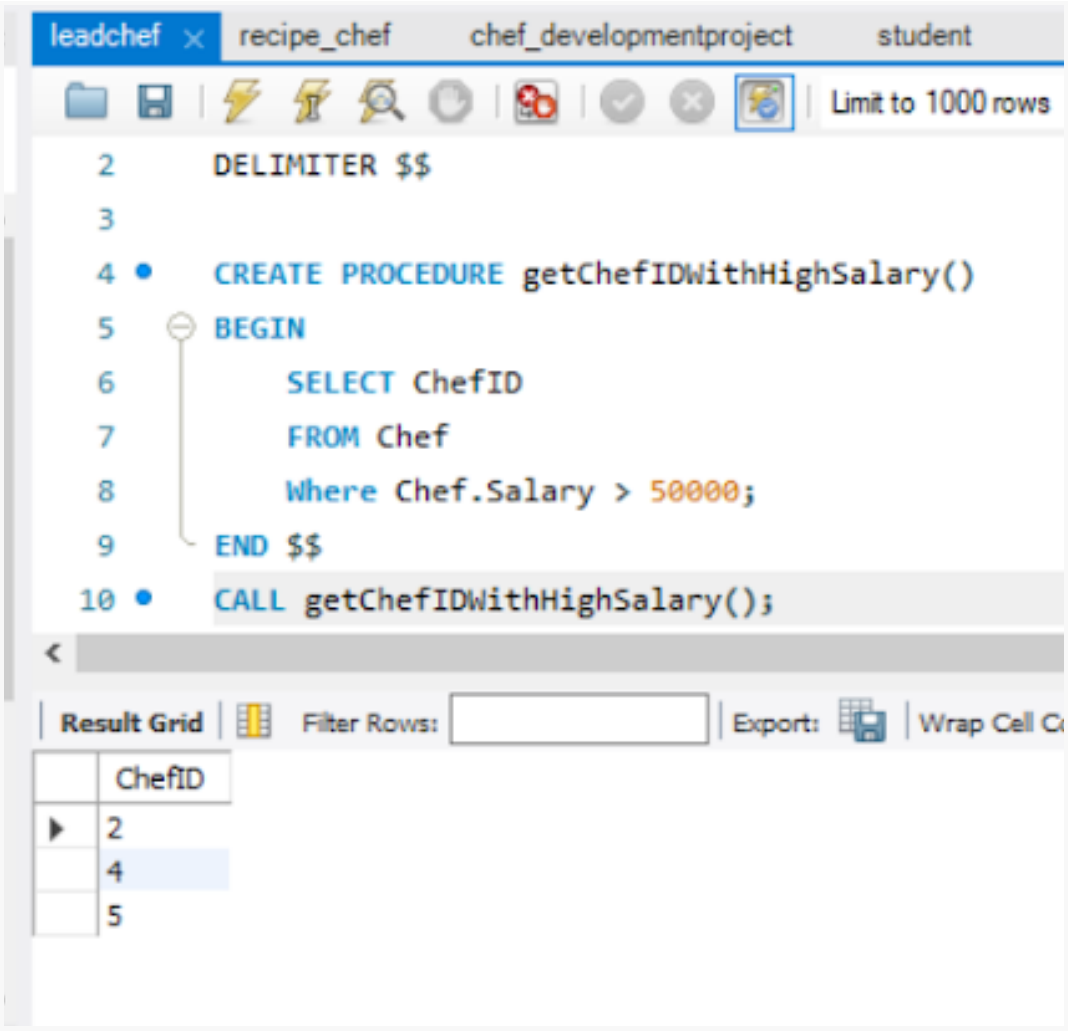
Name	RecipeID
Best Flavor	2
Prettiest Presentation	3
Most Creative	4
Best Looking	6
Greatest use of Spi...	7
Best Colors	8
Quickest Prep	9
Best Taste	13





Name	RecipeID
Best Flavor	2
Prettiest Presentation	3
Most Creative	4
Best Looking	6
Greatest use of Spi...	7
Best Colors	8
Quickest Prep	9
Best Taste	13

Stored Procedure:



Trigger:

```
DROP TRIGGER IF EXISTS DropStudent;
CREATE TRIGGER DropStudent
     BEFORE DELETE ON PERSON
     FOR EACH ROW
     DELETE Student FROM Student WHERE (Student.FKPersonID =
Person.PersonID);
```

Example Delete Query :

```
DELETE FROM Recipe_Delight.Recipe_Award
WHERE (RecipeID = 9) AND AwardID = 8) AND Date = (“2018-04-22);
```

Example Update Query :

```
UPDATE AWARD SET `Name` = 'Most Tasty'
WHERE(AwardID = 1);
```

Example of INDEX for a Report(Management):

```
CREATE INDEX NameIndex ON Person(LastName,FirstName);
```

Advanced SQL Features:

- Person to Chef and Student Specialization
- Trigger “DropStudent” to delete the person data when deleting a student.
- Stored Procedure “GetChefIDWithHighSalary” to return the ChefID’s of Chefs making over $50,000.

Executive Summary

Our team has created a database- ReciepeDelight through mySQL. The purpose of our database is to be a site to be able to store information for recipes, awards, students, and chefs. Information about people at RD Institute can be found, or instructions to create particular recipes. Through creating tables, implementing and then testing them we can designed and documented a database solution of RecipeDelight for the RD Institute. The prototype database is filled with test data to show how this design can work for you.

An ecookbook will be an efficient and effective way to grab yummy recipes with simple ingredients to make a good meal! The eCookBook is sorted by theme of the recipes inside and will show how many recipes are in it. Not only is our database a ecookbook but also a tracker of the students and chefs enrolled and registered. The database table values include but are not limited to Persons- name, email, city, Recipes- awards, name, ingredients. Both Student and Chef participation in the creation of recipes is tracked along with any awards that recipe has received. In our software ingredients quantities come in english units and can be manipulated to serve more or less people.

The trigger we have chosen to add will automatically drop the all personal information on students while not deleting any recipes they were a part of. The three query reports - chefs, students and a management report. Features like counting how many awards a recipe that a particular chef has made wins, and updating date of publishing are also included in our database to enhance information offered to a user and delete a student from the database once they have graduated they no longer need to be enrolled and should be removed to keep our system clean. All features are in hope to ease usage for chefs, students, and others.

Data Dictionary