

1. **SELECT custName, custEmail AS ContactInfo, customerType FROM Customers;**

	custName	ContactInfo	customerType
►	John Cena	JohnCena@gmail.com	Person
	Sakamoto Yamasaki	Toyota@toyota.com	Corporation
	Bill Nye	BillBillBill@hotmail.com	Person
	Justin Bieber	BieberFever@hotmail.com	Person
	Brendan White	PartyCity8937@gmail.com	Corporation
	Gavin Smith	Gamestop1213@gmail.com	Corporation
	Elon Musk	MuskyBoy@hotmail.com	Person
	Billy Ray Cyrus	HorsesInTheBack@gmail.com	Person
	Tryndamere	riotgames@gmail.com	Corporation
	Bob Bob	BobBob@hotmail.com	Person
	Jeff Bezos	JeffBezos\$\$\$@gmail.com	Person
	Mike Wazowski	Apple@apple.com	Corporation
	Ariana Grande	Samsung@samsung.com	Corporation
	Brett Foster	ImLovinIt@verizon.net	Corporation
	Justin Brown	Ford@ford.com	Corporation
	Jason Ramirez	Walmart@walmart.com	Corporation
	Julie Everton	Amazon@amazon.com	Corporation

2. **SELECT CustomersID, custName, o.OrderID, SUM(price\*quantity) AS orderAmount FROM MenuMI mi**

**INNER JOIN OrderDetails od ON od.MenuItemID = mi.MenuItemID**

**INNER JOIN `Order` o ON o.OrderID = od.OrderID**

**INNER JOIN Customers c ON c.CustomersID = o.CustomerID**

**WHERE mi.MenuID = od.MenuID**

**GROUP BY o.OrderID;**

	CustomersID	custName	OrderID	orderAmount
►	193891	Gavin Smith	101	70.95
	193891	Gavin Smith	102	0.00
	247695	Elon Musk	104	137.90
	578399	Brett Foster	105	107.88
	193891	Gavin Smith	108	38.97
	193891	Gavin Smith	111	32.98
	418931	Bob Bob	115	84.94
	290414	Billy Ray Cyrus	127	71.92
	578399	Brett Foster	129	10.99
	290414	Billy Ray Cyrus	135	23.98
	809831	Justin Brown	137	62.95
	136979	Bill Nye	142	87.94
	515668	Ariana Grande	160	197.78
	515668	Ariana Grande	165	47.96
	987214	Julie Everton	175	59.95
	193891	Gavin Smith	178	50.97

- SELECT CustomersID, custName, SUM(price\*quantity) AS totalSpent FROM MenuMI mi**  
**INNER JOIN OrderDetails od ON od.MenuitemID = mi.MenuitemID**  
**INNER JOIN `Order` o ON o.OrderID = od.OrderID**  
**INNER JOIN Customers c ON c.CustomersID = o.CustomerID**  
**WHERE mi.MenuID = od.MenuID AND o.orderDate BETWEEN '2017-05-01' AND '2019-05-01'**  
**GROUP BY o.CustomerID**  
**ORDER BY totalSpent DESC LIMIT 3;**

	CustomersID	custName	totalSpent
►	515668	Ariana Grande	245.74
	193891	Gavin Smith	193.87
	247695	Elon Musk	137.90

- SELECT name, COUNT(menuitemSet) AS NumberOfMenuItems,**  
**GROUP\_CONCAT(menuitemSet) AS menuitems FROM MenuitemSet**  
**INNER JOIN Employee USING(EmployeeID)**  
**GROUP BY name**  
**HAVING COUNT(menuitemSet) >= 3;**

	name	NumberOfMenuItems	menuItems
►	Biden Joe	4	Chow Mein,Lo Mein,Fried Rice,Dim Sum
	Bob Builder	3	Spring Rolls,Ginger Salmon,Teriyaki Salmon
	Collin Doss	6	Hot and Sour Soup,Honey Walnut Shrimp,Fried Tofu,Spring Rolls,Chin...
	Grand Theft	3	Classic Special,Chicken Chop Suey,Barbecue Pork
	Jason Byrne	6	Honey Walnut Shrimp,Fried Tofu,Sweet and Sour Chicken,Barbecue P...
	Nance Bat	7	Beef & Broccoli,Orange Chicken,Honey Walnut Shrimp,General Tsao's ...
	Search Engine	3	Sweet and Sour Chicken,Orange Chicken,General Tsao's Chicken

5. **SELECT** emp1.name AS SousChef1, emp2.name AS SousChef2,  
**COUNT**(sousA.menuItemSet) AS NumberOfMenuItems **FROM**
- (**SELECT** \* **FROM** MenuItemSet **WHERE** EmployeeID IN
- (**SELECT** EmployeeID **FROM** MenuItemSet **GROUP BY** EmployeeID **HAVING**  
**COUNT**(menuItemSet) >=3))
- sousA **INNER JOIN**
- (**SELECT** \* **FROM** MenuItemSet **WHERE** EmployeeID IN
- (**SELECT** EmployeeID **FROM** MenuItemSet **GROUP BY** EmployeeID **HAVING**  
**COUNT**(menuItemSet) >=3))
- sousB **ON** sousA.EmployeeID != sousB.EmployeeID **AND** sousA.menuItemSet =  
sousB.menuItemSet
- INNER JOIN** Employee emp1 **ON** emp1.EmployeeID = sousA.EmployeeID
- INNER JOIN** Employee emp2 **ON** emp2.EmployeeID = sousB.EmployeeID
- WHERE** emp1.name > emp2.name
- GROUP BY** sousA.EmployeeID, sousB.EmployeeID
- HAVING** NumberOfMenuItems >=3

	SousChef1	SousChef2	NumberOfMenuItems
►	Jason Byrne	Collin Doss	4
	Search Engine	Nance Bat	3

6. **SELECT** (**SELECT** `name` **FROM** MenuItem **WHERE** MenuItem.MenuItemID =  
OrderDetails.MenuItemID) AS MenuItem,
- SUM**(quantity) AS itemAmount **FROM** OrderDetails
- WHERE** MenuID = 4
- GROUP BY** MenuItemID
- ORDER BY** itemAmount **DESC** **LIMIT** 3;

	MenuItem	itemAmount
▶	Orange Chicken	15
	Hot and Sour Soup	14
	Beef & Broccoli	8

7. (NOT DONE)

8. **SELECT CustomersID, custName, MimingsMoney FROM Customers**

**ORDER BY MimingsMoney DESC;**

	CustomersID	custName	MimingsMoney
▶	471263	Jeff Bezos	20398
	123907	Sakamoto Yamasaki	12543
	247695	Elon Musk	10039
	987214	Julie Everton	9999
	515668	Ariana Grande	8745
	908199	Jason Ramirez	6589
	809831	Justin Brown	6545
	190148	Brendan White	1391
	512389	Mike Wazowski	1212
	193891	Gavin Smith	537
	371961	Tryndamere	330
	136979	Bill Nye	137
	105838	John Cena	86
	290414	Billy Ray Cyrus	69
	158946	Justin Bieber	59
	418931	Bob Bob	57
	578399	Brett Foster	50

9. **SELECT CustomersID, custName, SUM(price\*quantity) AS totalSpent FROM MenuMI mi**

**INNER JOIN OrderDetails od ON od.MenuitemID = mi.MenuitemID**

**INNER JOIN `Order` o ON o.OrderID = od.OrderID**

**INNER JOIN Customers c ON c.CustomersID = o.CustomerID**

**WHERE mi.MenuID = od.MenuID**

**GROUP BY o.CustomerID**

**ORDER BY totalSpent DESC;**

	CustomersID	custName	totalSpent
►	515668	Ariana Grande	245.74
	193891	Gavin Smith	193.87
	247695	Elon Musk	137.90
	578399	Brett Foster	118.87
	290414	Billy Ray Cyrus	95.90
	136979	Bill Nye	87.94
	418931	Bob Bob	84.94
	809831	Justin Brown	62.95
	987214	Julie Everton	59.95

10. (NOT DONE)

**11. SELECT CustomersID, custName, SUM(price\*quantity) AS orderAmount FROM MenuMI mi  
 INNER JOIN OrderDetails od ON od.MenuItemID = mi.MenuItemID  
 INNER JOIN `Order` o ON o.OrderID = od.OrderID  
 INNER JOIN Customers c ON c.CustomersID = o.CustomerID  
 WHERE mi.MenuID = od.MenuID AND o.orderDate BETWEEN '2018-05-01' AND '2019-05-01'  
 GROUP BY o.CustomerID  
 ORDER BY orderAmount DESC LIMIT 3;**

	CustomersID	custName	orderAmount
►	578399	Brett Foster	107.88
	136979	Bill Nye	87.94
	418931	Bob Bob	84.94

**12. SELECT name AS miName, SUM(price\*quantity) AS orderAmount FROM MenuItem mi  
 INNER JOIN MenuMI mmi ON mmi.MenuItemID = mi.MenuItemID  
 INNER JOIN OrderDetails od ON od.MenuItemID = mi.MenuItemID  
 INNER JOIN `Order` o ON o.OrderID = od.OrderID  
 WHERE mmi.MenuID = od.MenuID AND o.orderDate BETWEEN '2018-05-01' AND '2019-05-01'  
 GROUP by miName  
 ORDER BY orderAmount DESC LIMIT 5;**

	miName	orderAmount
►	Chicken Chow Mein	73.95
	Chinese Omelette	55.96
	Orange Chicken	52.95
	Coconut Shrimp	50.97
	Fried Rice	44.97

**13. SELECT e1.EmployeeID, e1.name AS Mentor, e2.EmployeeID, e2.name AS Mentee, mi.name AS MenuItemName FROM MentorShip ment**

**INNER JOIN MenuItem mi ON ment.MenuItemID = mi.MenuItemID**

**INNER JOIN Employee e1 ON e1.EmployeeID = MentorID**

**INNER JOIN Employee e2 ON e2.EmployeeID = MenteeID**

**WHERE MentorID IN**

**(SELECT MentorID FROM MentorShip GROUP BY MentorID HAVING COUNT(MenuItemID) =**

**(SELECT MAX(NumberOfMenuItems) FROM**

**(SELECT MentorID, COUNT(MenuItemID) AS NumberOfMenuItems FROM MentorShip GROUP BY MentorID) e1));**

	EmployeeID	Mentor	EmployeeID	Mentee	MenuItemName
►	5	Collin Doss	6	Bob Builder	Hot and Sour Soup
	5	Collin Doss	11	Jason Byrne	Sweet and Sour Chicken
	5	Collin Doss	71	Nance Bat	Ginger Salmon

**14. SELECT menuItemSet, COUNT(EmployeeID) AS SousChefCount FROM MenuItemSet**

**GROUP BY menuItemSet**

**ORDER BY SousChefCount ASC LIMIT 3;**

	menuItemSet	SousChefCount
►	Ginger Salmon	1
	Crispy Orange Beef	1
	Dim Sum	1

**15. SELECT custName , corpName FROM Customers**

**INNER JOIN Corporation**

**WHERE Customers.CustomerID = Corporation.CustomerID;**

	custName	corpName
►	Sakamoto Yamasaki	Toyota Inc
	Brendan White	Party City
	Gavin Smith	Game Stop
	Tryndamere	Riot Games
	Mike Wazowski	Apple Inc
	Ariana Grande	Samsung Inc
	Brett Foster	McDonalds
	Justin Brown	Ford Automobiles
	Jason Ramirez	Walmart Inc
	Julie Everton	Amazon Inc

**16. SELECT m.menuType, mi.name, size, price FROM MenuMI menMI  
 INNER JOIN MenuItem mi ON mi.MenuItemID = menMI.MenuItemID  
 INNER JOIN Menu m ON m.MenuID = menMI.MenuID;**

menuType	name	size	price
Evening	Hot and Sour Soup	L	12.99
Evening	Chow Mein	L	13.99
Evening	Spring Roll	L	15.99
Evening	Fried Rice	L	14.99
Evening	Fried Tofu	L	17.99
Evening	Orange Chicken	L	12.99
Evening	Beef & Broccoli	L	14.99
Evening	Crispy Orange Beef	L	10.99
Evening	Barbecue Pork	L	10.99
Evening	Sweet and Sour Chicken	L	12.99
Evening	Wonton Soup	L	16.99
Evening	Lo Mein	L	14.99
Evening	Ginger Salmon	L	12.99
Evening	Teriyaki Salmon	L	13.99
Evening	Coconut Shrimp	L	16.99
Evening	Honey Walnut Shrimp	L	17.99
Evening	Teriyaki Chicken	L	12.99
Evening	Chinese Omelette	L	13.99
Evening	Seafood Chow Mein	L	14.99
Evening	Chicken Chow Mein	L	15.99
Evening	General Tsaos Chicken	L	15.99
Evening	Classic Special	L	14.99
Evening	Chicken Chop Suey	L	13.99
Evening	Pork Chop Suey	L	14.99
Lunch	Dim Sum	M	10.99
Lunch	Hot and Sour Soup	M	12.99
Lunch	Chow Mein	M	13.99
Lunch	Spring Roll	M	12.99
Lunch	Fried Rice	M	15.99
Lunch	Fried Tofu	M	10.99
Lunch	Orange Chicken	M	12.99
Lunch	Beef & Broccoli	M	8.99
Lunch	Crispy Orange Beef	M	8.99
Lunch	Barbecue Pork	M	10.99
Lunch	Sweet and Sour Chicken	M	12.99
Lunch	Wonton Soup	M	14.99
Lunch	Lo Mein	M	12.99
Lunch	Ginger Salmon	M	10.99
Lunch	Teriyaki Salmon	M	9.99
Lunch	Coconut Shrimp	M	14.99
Lunch	Honey Walnut Shrimp	M	14.99
Lunch	Teriyaki Chicken	M	10.99
Lunch	Chinese Omelette	M	11.99
Lunch	Seafood Chow Mein	M	12.99
Lunch	Chicken Chow Mein	M	13.99
Lunch	General Tsaos Chicken	M	13.99
Lunch	Classic Special	M	12.99
Lunch	Chicken Chop Suey	M	10.99
Lunch	Pork Chop Suey	M	11.99
Childrens	Hot and Sour Soup	S	8.99
Childrens	Orange Chicken	S	8.99
Childrens	Beef & Broccoli	S	8.99
Childrens	Teriyaki Chicken	S	8.99

17. EC (NOT DONE)



18.

- a. There can be no more than 3 "Oh My God" spicy level foods on one order.

```
SELECT od.OrderID AS OrderIDNum, SUM(od.quantity) AS Quantity, sp.spiceAbbr AS  
SpiceLevel FROM Spices sp
```

```
INNER JOIN MenuItem mi ON mi.spiceAbbr = sp.spiceAbbr
```

```
INNER JOIN MenuItem mmi ON mmi.MenuItemID = mi.MenuItemID
```

```
INNER JOIN OrderDetails od ON od.MenuItemID = mi.MenuItemID
```

```
INNER JOIN `Order` o ON o.OrderID = od.OrderID
```

```
WHERE sp.spiceAbbr = "OMG" AND mmi.MenuID = od.MenuID
```

```
GROUP BY OrderIDNum
```

```
ORDER BY Quantity DESC;
```

	OrderIDNum	Quantity	SpiceLevel
►	199	3	OMG
	200	2	OMG
	102	2	OMG

- b. When a corporation places an order, there will be a 10% fee added onto the grand total of the bill.

```
SELECT corpName, o.OrderID,  
SUM(ROUND(((quantity*price)+(quantity*price*0.10)),2)) AS TotalPlusCorpFee FROM  
Corporation corp
```

```
INNER JOIN Customers c ON c.CustomersID = corp.CustomerID
```

```
INNER JOIN `Order` o ON o.CustomerID = c.CustomersID
```

```
INNER JOIN OrderDetails od ON od.OrderID = o.OrderID
```

```
INNER JOIN MenuItem mmi ON mmi.MenuItemID = od.MenuItemID
```

```
WHERE corp.CustomerID = c.CustomersID and quantity*price != 0 AND mmi.MenuID =  
od.MenuID
```

```
GROUP BY o.OrderID
```

```
ORDER BY corpName;
```

	corpName	OrderID	TotalPlusCorpFee
►	Amazon Inc	175	65.95
	Ford Automobiles	137	69.25
	Game Stop	101	78.05
	Game Stop	108	42.87
	Game Stop	111	36.28
	Game Stop	178	56.07
	McDonalds	105	118.68
	McDonalds	129	12.09
	Party City	200	29.68
	Riot Games	199	42.87
	Samsung Inc	160	217.56
	Samsung Inc	165	52.76

- c. The tips for the wait staff will automatically be added to the bill at 20% for each bill over \$250

```
SELECT custName, o.OrderID,  
SUM(ROUND(((quantity*price)+(quantity*price*0.20)),2)) AS TotalBillPlusTip FROM  
Customers c
```

```
INNER JOIN `Order` o ON o.CustomerID = c.CustomerID
```

```
INNER JOIN OrderDetails od ON od.OrderID = o.OrderID
```

```
INNER JOIN MenuMI mmi ON mmi.MenuItemID = od.MenuItemID
```

```
WHERE mmi.MenuID = od.MenuID
```

```
GROUP BY o.OrderID
```

```
HAVING SUM(quantity*price) > 250
```

```
ORDER BY TotalBillPlusTip DESC;
```

	custName	OrderID	TotalBillPlusTip
►	Ariana Grande	160	496.25
	Elon Musk	104	381.32