

Ross Panning
Homework 03
CSCI 3287

Question 1:

```
select distinct city
  from customers
 where country = 'Spain'
 order by city ASC;
```

	city
▶	Barcelona
	Madrid
	Sevilla

Question 2:

```
select employeeNumber, lastName, firstName
  from employees
 where officeCode in (

  select officeCode
    from offices
   where city = 'Paris');
```

	employeeNumber	lastName	firstName
▶	1102	Bondur	Gerard
	1337	Bondur	Loui
	1370	Hernandez	Gerard
	1401	Castillo	Pamela
	1702	Gerard	Martin
●	NULL	NULL	NULL

Question 3:

```
select productCode, productName, productScale, productVendor, buyPrice
      from products
     where productLine = "Motorcycles" and (50 < buyPrice and buyPrice < 80);
```

	productCode	productName	productScale	productVendor	buyPrice
▶	S10_2016	1996 Moto Guzzi 1100i	1:10	Highway 66 Mini Classics	68.99
	S12_2823	2002 Suzuki XREO	1:12	Unimax Art Galleries	66.27
	S24_1578	1997 BMW R 1100 S	1:24	Autoart Studio Design	60.86
	S32_1374	1997 BMW F650 ST	1:32	Exoto Designs	66.92
	S32_4485	1974 Ducati 350 Mk3 Desmo	1:32	Second Gear Diecast	56.13
*	NULL	NULL	NULL	NULL	NULL

Question 4:

```
select productCode, productName, productLine, quantityInStock, buyPrice
      from products
     where productLine = 'Vintage Cars' and productVendor = 'Exoto Designs'
    order by buyPrice ASC
   LIMIT 1;
```

	productCode	productName	productLine	quantityInStock	buyPrice
▶	S18_4409	1932 Alfa Romeo 8C2300 Spider Sport	Vintage Cars	6553	43.26
*	NULL	NULL	NULL	NULL	NULL

Question 5:

```
select O.productName, O.productVendor, E.quantityOrdered,
       E.quantityOrdered * E.priceEach as totalcost
      from products O, orderdetails E
     where O.productCode = E.productCode
    order by totalcost DESC
   LIMIT 5;
```

	productName	productVendor	quantityOrdered	totalcost
▶	2003 Harley-Davidson Eagle Drag Bike	Red Start Diecast	66	11503.14
	1969 Dodge Charger	Welly Diecast Productions	97	11170.52
	1917 Grand Touring Sedan	Welly Diecast Productions	76	10723.60
	1968 Ford Mustang	Autoart Studio Design	64	10460.16
	1952 Alpine Renault 1300	Classic Metal Creations	48	10286.40

Question6 :

```
select customerNumber, customerName, phone, country, state, salesRepEmployeeNumber,
creditLimit
    from customers
    where creditLimit > 130000
    order by creditLimit ASC;
```

	customerNumber	customerName	phone	country	state	salesRepEmployeeNumber	creditLimit
▶	187	AV Stores, Co.	(171) 555-1555	UK	NULL	1501	136800.00
	151	Muscle Machine Inc	2125557413	USA	NY	1286	138500.00
	298	Vida Sport, Ltd	0897-034555	Switzerland	NULL	1702	141300.00
	124	Mini Gifts Distributors Ltd.	4155551450	USA	CA	1165	210500.00
	141	Euro+ Shopping Channel	(91) 555 94 44	Spain	NULL	1370	227600.00
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Question 7:

```
select O.productCode, O.productName,
    count(E.orderNumber) as OrderCount
    from products O, orderdetails E
    where O.productVendor = 'Welly Diecast Productions' and E.productCode = O.productCode
    group by O.productCode
    order by OrderCount DESC /*There is actually a tie for the largest order count*/
    LIMIT 2;
```

productCode	productName	OrderCount
S12_1666	1958 Setra Bus	28
S18_2625	1936 Harley Davidson El Knucklehead	28

Question 8:

```
select O.customerName, O.city, O.state, O.country, O.creditLimit,
    count(E.orderNumber) as TotalProducts
    from customers O, orders E
    where E.orderNumber in (
```

```
        select orderNumber
            from orders
        where customerNumber = O.customerNumber)
    group by O.customerNumber
    order by TotalProducts DESC
    LIMIT 3;
```

	customerName	city	state	country	creditLimit	TotalProducts
▶	Euro + Shopping Channel	Madrid	NULL	Spain	227600.00	26
	Mini Gifts Distributors Ltd.	San Rafael	CA	USA	210500.00	17
	Australian Collectors, Co.	Melbourne	Victoria	Australia	117300.00	5

Question 9:

```
select officeCode, city, state, country
from offices
where NOT country = 'USA' and addressLine2 is NULL;
```

	officeCode	city	state	country
▶	4	Paris	NULL	France
	5	Tokyo	Chiyoda-Ku	Japan
•	NULL	NULL	NULL	NULL

Question 10:

```
select productName, productLine
from products
where (productName like '193%') and (productLine = 'Vintage Cars');
```

	productName	productLine
▶	1937 Lincoln Berline	Vintage Cars
	1936 Mercedes-Benz 500K Special Roadster	Vintage Cars
	1932 Model A Ford J-Coupe	Vintage Cars
	1934 Ford V8 Coupe	Vintage Cars
	1932 Alfa Romeo 8C2300 Spider Sport	Vintage Cars
	1939 Cadillac Limousine	Vintage Cars
	1939 Chevrolet Deluxe Coupe	Vintage Cars
	1938 Cadillac V-16 Presidential Limousine	Vintage Cars
	1937 Horch 930V Limousine	Vintage Cars
	1936 Mercedes Benz 500k Roadster	Vintage Cars
	1936 Chrysler Airflow	Vintage Cars
	1930 Buick Marquette Phaeton	Vintage Cars

Question 11:

```
select orderNumber, requiredDate, shippedDate,
       datediff(requiredDate, shippedDate) as Datediff
from orders
where (datediff(requiredDate, shippedDate) < 3) and (shippedDate like '2005%');
```

	orderNumber	requiredDate	shippedDate	Datediff
▶	10363	2005-01-12	2005-01-10	2
	10373	2005-02-08	2005-02-06	2
	10388	2005-03-11	2005-03-09	2
	10389	2005-03-09	2005-03-08	1
	10395	2005-03-24	2005-03-23	1
	10402	2005-04-14	2005-04-12	2
	10408	2005-04-29	2005-04-27	2
	10411	2005-05-08	2005-05-06	2
	10416	2005-05-16	2005-05-14	2
	10417	2005-05-19	2005-05-19	0

Question 12:

```
select O.customerNumber, O.customerName, O.city, O.country,
       count(E.orderNumber) as Orders
from customers O left outer join orders E
on O.customerNumber = E.customerNumber
where (O.customerNumber < 150)
group by O.customerNumber
order by Orders DESC;
```

	customerNumber	customerName	city	country	Orders
▶	141	Euro + Shopping Channel	Madrid	Spain	26
	124	Mini Gifts Distributors Ltd.	San Rafael	USA	17
	114	Australian Collectors, Co.	Melbourne	Australia	5
	145	Danish Wholesale Imports	Kobenhavn	Denmark	5
	148	Dragon Souvenirs, Ltd.	Singapore	Singapore	5
	119	La Rochelle Gifts	Nantes	France	4
	121	Baane Mini Imports	Stavern	Norway	4
	128	Blauer See Auto, Co.	Frankfurt	Germany	4
	131	Land of Toys Inc.	NYC	USA	4
	144	Volvo Model Replicas, Co	Luleå	Sweden	4
	103	Atelier graphique	Nantes	France	3
	112	Signal Gift Stores	Las Vegas	USA	3
	129	Mini Wheels Co.	San Franci...	USA	3
	146	Saveley & Henriot, Co.	Lyon	France	3
	125	Havel & Zbyszek Co	Warszawa	Poland	0

Question 13:

```
select distinct O.customerNumber, O.customerName
      from customers O left outer join orders E
    on O.customerNumber = E.customerNumber
 where (E.customerNumber is NULL) and (O.country = 'Switzerland');
```

	customerNumber	customerName
▶	293	BG&E Collectables
	376	Precious Collectables

Question 14:

```
select O.productLine,
      SUM(E.quantityOrdered) as quantity
  from products O, orderdetails E
 where (O.productCode = E.productCode)
 group by O.productLine
 having SUM(E.quantityOrdered) > 12000;
```

	productLine	quantity
▶	Classic Cars	35582
	Motorcycles	12778
	Vintage Cars	22933

Question 15:

```
create table if not exists TopCustomers(
      CustomerNumber INT not null,
      ContactDate DATE not null,
      OrderCount INT not null,
      OrderTotal decimal(9, 2) not null,
      constraint TopCustomer_PK primary key (CustomerNumber)
);
```

	CustomerNumber	Contact	OrderCount	OrderTotal
•	NULL	NULL	NULL	NULL

Question 16:

```
insert into TopCustomers
select O.customerNumber, '2021-02-28',
count(E.orderNumber) as quantity,
sum(P.quantityOrdered * P.priceEach) as TotalPrice
from customers O
inner join
orders as E
on O.customerNumber = E.customerNumber
inner join
orderdetails as P
on E.orderNumber = P.orderNumber
group by O.customerNumber
having sum(P.quantityOrdered * P.priceEach) > 130000;
```

	CustomerNumber	ContactDate	OrderCount	OrderTotal
▶	114	2021-02-28	55	180585.07
	119	2021-02-28	53	158573.12
	124	2021-02-28	180	591827.34
	131	2021-02-28	49	149085.15
	141	2021-02-28	259	820689.54
	146	2021-02-28	41	130305.35
	148	2021-02-28	43	156251.03
	151	2021-02-28	48	177913.95
	187	2021-02-28	51	148410.09
	276	2021-02-28	46	137034.22
	282	2021-02-28	46	133907.12
	321	2021-02-28	41	132340.78
	323	2021-02-28	46	154622.08
	382	2021-02-28	40	137480.07
	450	2021-02-28	40	143536.27
	496	2021-02-28	48	137460.79
	NULL	NULL	NULL	NULL

Question 17:

```
select customerNumber, contactDate, orderCount, orderTotal
  from topcustomers
 order by orderTotal DESC
LIMIT 5;
```

	customerNumber	contactDate	orderCount	orderTotal
▶	141	2021-02-28	259	820689.54
	124	2021-02-28	180	591827.34
	114	2021-02-28	55	180585.07
	151	2021-02-28	48	177913.95
	119	2021-02-28	53	158573.12

Question 18:

```
alter table TopCustomers
  add column CustomerRatings INT
 default (0);
```

	CustomerNumber	ContactDate	OrderCount	OrderTotal	CustomerRatings
▶	114	2021-02-28	55	180585.07	0
	119	2021-02-28	53	158573.12	0
	124	2021-02-28	180	591827.34	0
	131	2021-02-28	49	149085.15	0
	141	2021-02-28	259	820689.54	0
	146	2021-02-28	41	130305.35	0
	148	2021-02-28	43	156251.03	0
	151	2021-02-28	48	177913.95	0
	187	2021-02-28	51	148410.09	0
	276	2021-02-28	46	137034.22	0
	282	2021-02-28	46	133907.12	0
	321	2021-02-28	41	132340.78	0
	323	2021-02-28	46	154622.08	0
	382	2021-02-28	40	137480.07	0
	450	2021-02-28	40	143536.27	0
	496	2021-02-28	48	137460.79	0
✱	NULL	NULL	NULL	NULL	NULL

Question 19:

```
SET SQL_SAFE_UPDATES = 0;
update TopCustomers
    set CustomerRatings = FLOOR(RAND()*(10+1))
where customerNumber is not NULL;
```

	CustomerNumber	ContactDate	OrderCount	OrderTotal	CustomerRatings
▶	114	2021-02-28	55	180585.07	2
	119	2021-02-28	53	158573.12	2
	124	2021-02-28	180	591827.34	3
	131	2021-02-28	49	149085.15	0
	141	2021-02-28	259	820689.54	1
	146	2021-02-28	41	130305.35	7
	148	2021-02-28	43	156251.03	10
	151	2021-02-28	48	177913.95	6
	187	2021-02-28	51	148410.09	2
	276	2021-02-28	46	137034.22	3
	282	2021-02-28	46	133907.12	9
	321	2021-02-28	41	132340.78	5
	323	2021-02-28	46	154622.08	10
	382	2021-02-28	40	137480.07	4
	450	2021-02-28	40	143536.27	9
	496	2021-02-28	48	137460.79	1
•	NULL	NULL	NULL	NULL	NULL

Question 20: **NOTE different ratings cause multiple queries**

```
select customerNumber, contactDate, orderCount, orderTotal, CustomerRatings
from TopCustomers
order by CustomerRatings DESC;
```

	customerNumber	contactDate	orderCount	orderTotal	CustomerRatings
▶	114	2021-02-28	55	180585.07	10
	141	2021-02-28	259	820689.54	10
	119	2021-02-28	53	158573.12	8
	131	2021-02-28	49	149085.15	7
	148	2021-02-28	43	156251.03	6
	450	2021-02-28	40	143536.27	6
	496	2021-02-28	48	137460.79	6
	146	2021-02-28	41	130305.35	5
	151	2021-02-28	48	177913.95	4
	187	2021-02-28	51	148410.09	3
	282	2021-02-28	46	133907.12	3
	124	2021-02-28	180	591827.34	2
	276	2021-02-28	46	137034.22	2
	323	2021-02-28	46	154622.08	2
	321	2021-02-28	41	132340.78	0
	382	2021-02-28	40	137480.07	0

Question 21:

`drop table TopCustomers;`