

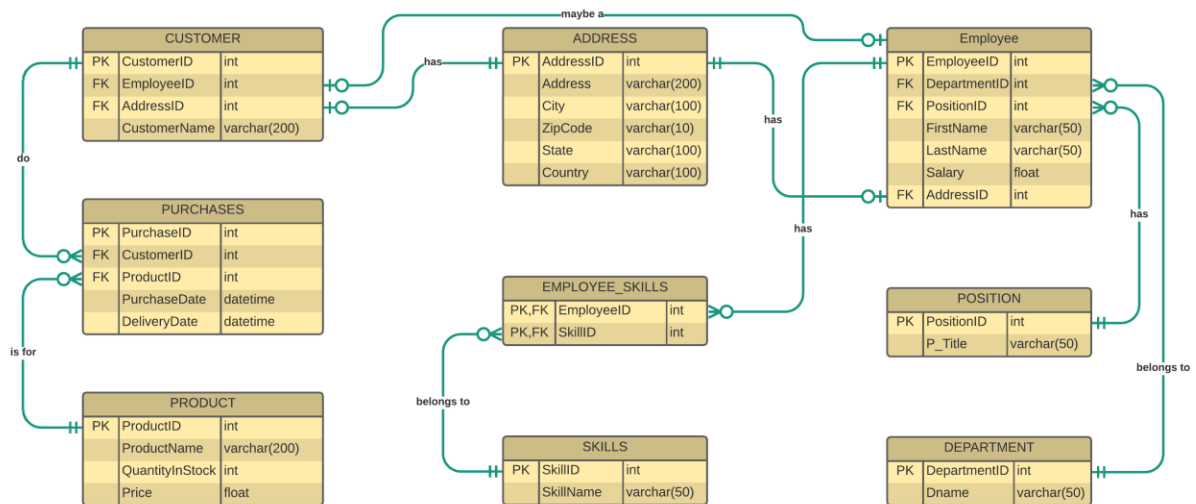
CST 2355

Assignment 2

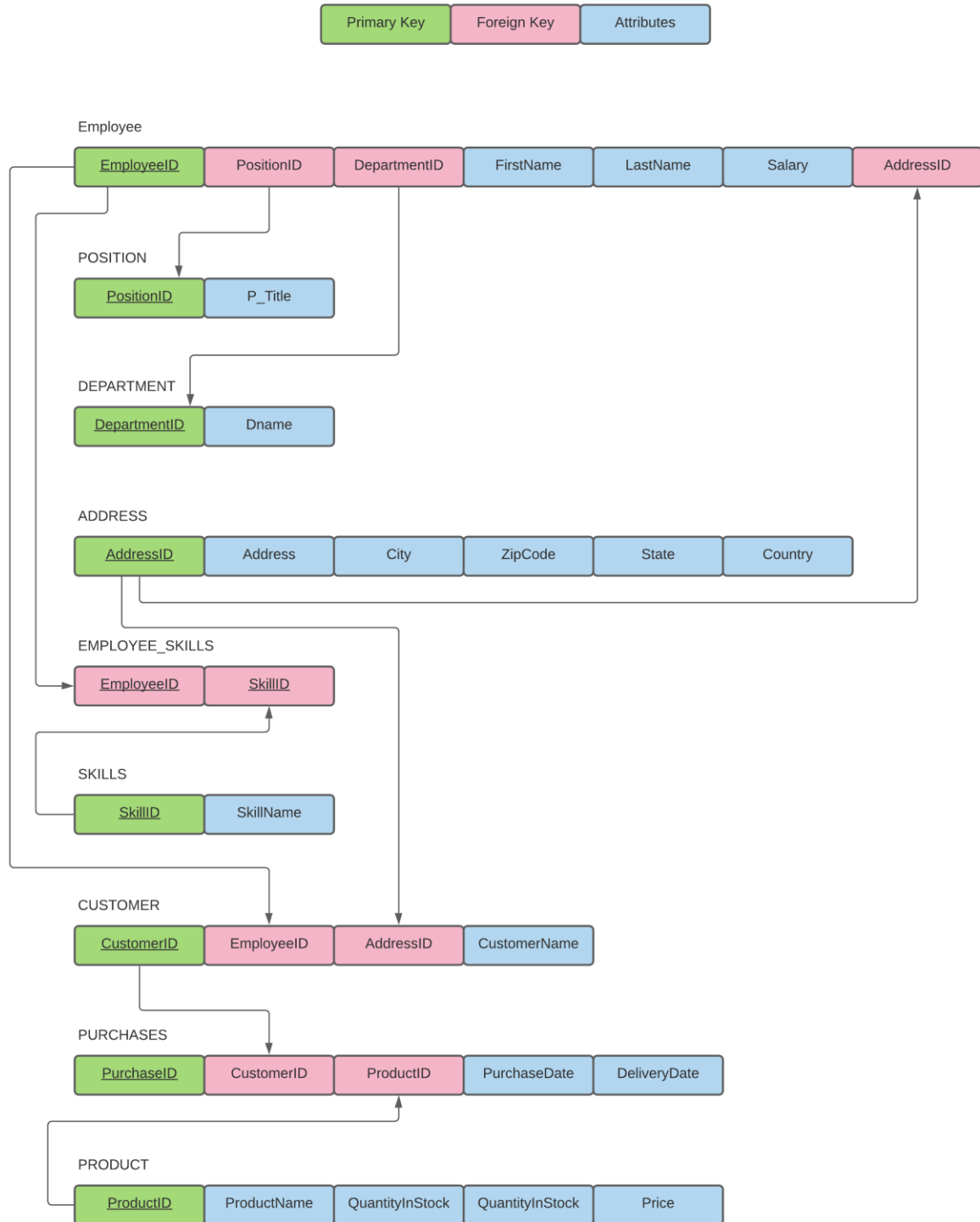
Freddy Sourial

41013272

Data Model ERD



Data Model Dependency



Transformation Decisions

Entity / Relationship	Table / Relationship	Explanation
EMPLOYEE	EMPLOYEE-POSITION EMPLOYEE-DEPARTMENT EMPLOYEE-SKILLS EMPLOYEE-CUSTOMER	The Employee Entity has relationship with Position, Department, Skills and Customer Entity
POSITION	POSITION-EMPLOYEE	The Position Entity has relationship with Employee Entity
DEPARTMENT	DEPARTMENT-EMPLOYEE	The Department Entity has relationship with Employee Entity
ADDRESS	ADDRESS-EMPLOYEE ADDRESS-CUSTOMER	The Address Entity has relationship with Employee and Customer Entity
SKILLS	SKILLS-EMPLOYEE	The Skills Entity has relationship with Employee Entity
CUSTOMER	CUSTOMER-EMPLOYEE CUSTOMER-ADDRESS CUSTOMER-PURCHASES	The Customer Entity has relationship with Employee, Address and Purchases Entity
PURCHASES	PURCHASES-CUSTOMER PURCHASES-PRODUCT	The Purchase Entity has relationship with Customer and Product Entity
PRODUCT	PRODUCT-PURCHASES	The Product Entity has relationship with Purchases Entity

Table Characteristics

Table	Column	Key	Not Null	Default	Data Type Oracle	Data Type SQL Server	Data Type MySQL
EMPLOYEE	EmployeeID	Yes (PK)	True	Not_Null	Int	Int	Int
	DepartmentID	Yes (FK)	False	Null	Int	Int	Int
	PositionID	Yes (FK)	False	Null	Int	Int	Int
	FirstName	No	False	Null	Varchar(50)	Varchar(50)	Varchar(50)
	LastName	No	False	Null	Varchar(50)	Varchar(50)	Varchar(50)
	Salary	No	False	Null	Float	Float	Float
	AddressID	Yes (FK)	False	Null	Int	Int	Int
POSITION	PositionID	Yes (PK)	True	Not_Null	Int	Int	Int
	P_Title	No	False	Null	Varchar(50)	Varchar(50)	Varchar(50)
DEPARTMENT	DepartmentID	Yes (PK)	True	Not_Null	Int	Int	Int
	Dname	No	False	Null	Varchar(50)	Varchar(50)	Varchar(50)
ADDRESS	AddressID	Yes (PK)	True	Not_Null	Int	Int	Int
	Address	No	False	Null	Varchar(200)	Varchar(200)	Varchar(200)
	City	No	False	Null	Varchar(100)	Varchar(100)	Varchar(100)
	PostalCode	No	False	Null	Varchar(10)	Varchar(10)	Varchar(10)
	State	No	False	Null	Varchar(100)	Varchar(100)	Varchar(100)
	Country	No	False	Null	Varchar(100)	Varchar(100)	Varchar(100)

SKILLS	SkillID	Yes (PK)	True	Not_Null	Int	Int	Int
	SkillName	No	False	Null	Varchar(50)	Varchar(50)	Varchar(50)
CUSTOMER	CustoemrID	Yes (PK)	True	Not_Null	Int	Int	Int
	EmployeeID	Yes (FK)	False	Null	Int	Int	Int
	AddressID	Yes (FK)	False	Null	Int	Int	Int
	CustomerName	No	False	Null	Varchar(200)	Varchar(200)	Varchar(200)
PURCHASES	PurchaseID	Yes (PK)	True	Not_Null	Int	Int	Int
	CustomerID	No	False	Null	Int	Int	Int
	ProductID	No	False	Null	Int	Int	Int
	PurchaseDate	No	False	Null	Timestamp	Datetime	Datetime
	DeliveryDate	No	False	Null	Timestamp	Datetime	Datetime
PRODUCT	ProductID	Yes (PK)	True	Not_Null	Int	Int	Int
	ProductName	No	False	Null	Varchar(200)	Varchar(200)	Varchar(200)
	Price	No	False	Null	Float	Float	Float
	QuantityInStock	No	False	Null	Int	Int	Int

Employee Salary Report

```

select CONCAT(e.FirstName, ' ', e.LastName) AS EmployeeName, e.Salary,
(e.Salary-((e.Salary*t.TaxRate)/100)) TotalPaid,
((e.Salary*t.TaxRate)/100) as TotalTax,
ad.Address,
d.Dname
from TAX t inner join address ad on t.ProvinceCode=ad.State

```

right join Employee e on e.AddressID=ad.AddressID join Department d on
d.DepartmentID=e.DepartmentID

EmployeeName	Salary	TotalPaid	TotalTax	Address	Dname
Francoise Rautenstrauch	36359	32359.51	3999.49	2335 Canton Hwy #6	operations
Kendra Loud	40954	36858.6	4095.4	6 Arch St #9757	Ops
Lourdes Bauswell	40926	36424.14	4501.86	9547 Belmont Rd #21	Training
Hannah Edmison	44077	38787.76	5289.24	73 Pittsford Victor Rd	Training / education
Tom Loeza	43545	41367.75	2177.25	447 Commercial St Se	Safety
Queenie Kramarczyk	47833	42093.04	5739.96	47 Garfield Ave	Safety and Maintenance
Hui Portaro	71552	64396.8	7155.2	3 Mill Rd	Finance
Josefa Opitz	105107	93545.23	11561.77	136 W Grand Ave #3	Finance
Lea Steinhaus	77421	68904.69	8516.31	80 Maplewood Dr #34	Financial
Paola Vielma	115908	103158.12	12749.88	58 Hancock St	Finance
Hortencia Bresser	47153	43380.76	3772.24	808 Calle De Industrias	Finance
Leanna Tijerina	64667	57553.63	7113.37	2859 Dorsett Rd	Finance
Danilo Pride	34736	32999.2	1736.8	6857 Wall St	Software
Huey Marcille	36624	34792.8	1831.2	169 Journal Sq	Software Services
Apolonia Warne	51681	46512.9	5168.1	3 E 31st St #77	Admiin
Chandra Lagos	62893	55974.77	6918.23	7 N Dean St	Admin
Crissy Pacholec	136819	121768.91	15050.09	85 S State St	Finance Department

Employee is Customer Report

```
SELECT e.FirstName,  
pd.ProductName,  
pd.Price,  
SUM(pd.Price) as TotalPurchased  
from Employee e INNER JOIN Customer c on e.EmployeeID=c.EmployeeID  
LEFT JOIN Purchases P on P.CustomerID=c.CustomerID INNER JOIN Product pd  
on pd.ProductID=P.ProductID  
GROUP BY e.FirstName,pd.ProductName,pd.Price
```

FirstName	ProductName	Price	TotalPurchased
Corrie	black mobile skin	14.59	14.59
Corrie	car battery	45.53	45.53
Corrie	Gummy wire	14.99	14.99
Corrie	paper toffee	20.26	20.26
Corrie	waterpark weekend pass	55	55
Leanna	auto battery	45.53	45.53
Leanna	Chocolate Mints	33	33
Leanna	fishing rod	182.1	182.1
Leanna	Gummy wire	14.99	14.99
Leanna	paper toffee	20.26	20.26

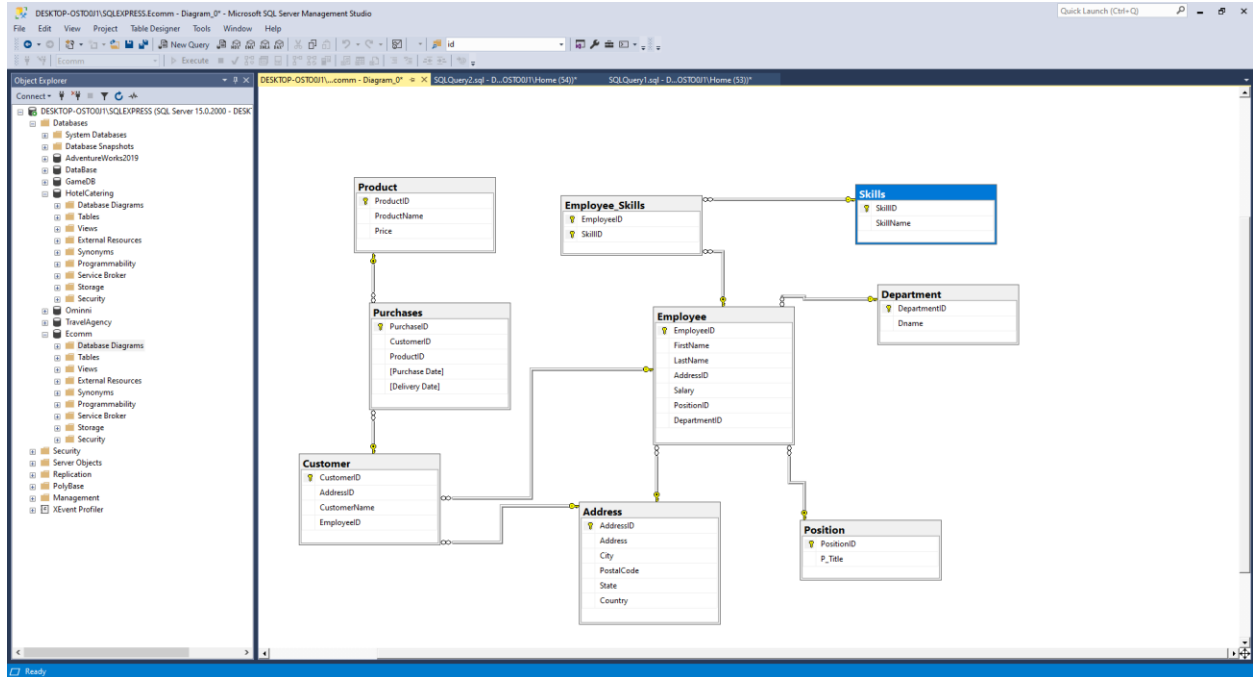
Competency Tracking Report

```
SELECT CONCAT(e.FirstName, ' ', e.LastName) AS EmployeeName,  
s.SkillName  
FROM Employee e inner join Employee_Skills es  
on e.EmployeeID=es.EmployeeID left join  
Skills s on es.SkillID=s.SkillID
```


EmployeeName	SkillName
Francoise Rautenstrauch	Operations
Kendra Loud	Operations
Lourdes Bauswell	Operations
Hannah Edmison	Operations
Tom Loeza	Operations
Queenie Kramarczyk	Operations
Hui Portaro	Operations
Josefa Opitz	Operations
Lea Steinhaus	Operations
Paola Vielma	Operations
Hortencia Bresser	Operations
Leanna Tijerina	Operations
Danilo Pride	Operations
Huey Marcille	Operations
Apolonia Warne	Operations
Chandra Lagos	Operations
Crissy Pacholec	Marketing

Microsoft SQL Server

Database Design Diagram



Address Table

DESKTOP-OST00J1\...mm - dbo.Address			
	Column Name	Data Type	Allow Nulls
	AddressID	int	<input type="checkbox"/>
	Address	nvarchar(200)	<input checked="" type="checkbox"/>
	City	nvarchar(100)	<input checked="" type="checkbox"/>
	PostalCode	nvarchar(10)	<input checked="" type="checkbox"/>
	State	nvarchar(100)	<input checked="" type="checkbox"/>
	Country	nvarchar(100)	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Address Table Data

Results Messages						
	AddressID	Address	City	PostalCode	State	Country
1	1	2335 Canton Hwy #6	Windsor	N8N 3N2	ON	NULL
2	2	6 Arch St #9757	Alcida	E8J 2C4	NB	NULL
3	3	9547 Belmont Rd #21	Belleville	K8P 1B3	ON	NULL
4	4	73 Pittsford Victor Rd	Vancouver	V5Z 3K2	BC	NULL
5	5	447 Commercial St Se	Llle-Perrot	J7V 4T4	QC	NULL
6	6	47 Garfield Ave	Swift Current	S9H 4V2	SK	NULL
7	7	3 Mill Rd	Baker Brook	E7A 1T3	NB	NULL
8	8	136 W Grand Ave #3	Delhi	N4B 1C4	ON	NULL
9	9	80 Maplewood Dr #34	Bradford	L3Z 2S4	ON	NULL
10	10	58 Hancock St	Aurora	L4G 2J7	ON	NULL
11	11	808 Calle De Industrias	New Waterford	B1H 1Z4	NS	NULL
12	12	2859 Dorsett Rd	North York	M9L 2T9	ON	NULL
13	13	6857 Wall St	Red Deer	T4R 2H5	AB	NULL
14	14	169 Journal Sq	Edmonton	T5P 1G9	AB	NULL
15	15	3 E 31st St #77	Fredericton	E3G 0A3	NB	NULL
16	16	7 N Dean St	Etobicoke	M8Z 3P6	ON	NULL
17	17	85 S State St	Barrie	L4N 6T7	ON	NULL
18	18	100 Main St	Calgary	T2K 4X5	AB	NULL
19	19	6185 Bohn St #72	Pangman	S0C 2C0	SK	NULL

Customer Table

DESKTOP-OSTO0J1\...m - dbo.Customer - SQLQuery4.sql - D...OSTO0			
	Column Name	Data Type	Allow Nulls
▶	CustomerID	int	<input type="checkbox"/>
	AddressID	int	<input checked="" type="checkbox"/>
	CustomerName	nvarchar(200)	<input checked="" type="checkbox"/>
	EmployeeID	int	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Customer Table Data

Results Messages					
	CustomerID	AddressID	CustomerName		EmployeeID
1	1	41	Adams Balcom & Larose Pc	Blanche Dundas	NULL
2	2	42	All Brevard Cert Apprsls Inc	George Brane	NULL
3	3	43	Bary, Anthony S Esq	Lori Beggon	NULL
4	4	44	Cgi Systems Inc	Cristopher Pakalec	NULL
5	5	45	Andy Christer		NULL
6	6	46	Danny Proud		NULL
7	7	47	Felton Yafer		NULL
8	8	48	Lyle Fuccate		NULL
9	9	49	General Color Co Inc	Valentino Bullum	NULL
10	10	50	Judy, Henry L Esq	Laura Randalle	NULL
11	11	51	Comie Kardell		25
12	12	52	Kitchen People	Aphollo Wayne	NULL
13	13	53	Leanna Tijerina		12
14	14	54	Meredith Realty Group Inc	Chandra Lagotte	NULL
15	15	55	Mershon Metal Specialties Inc	Willard White	NULL
16	16	56	Lisa Michelle		NULL
17	17	57	Kim Rabu		NULL
18	18	58	Southern Idaho Pipe & Stl Corp	Huey Market	NULL
19	19	59	Holly Standman		NULL

Department Table

DESKTOP-OSTO0J1\S...- dbo.Department X SQLQuery5.sql - D...OSTO			
	Column Name	Data Type	Allow Nulls
▶ 🔑	DepartmentID	int	<input type="checkbox"/>
	Dname	nvarchar(50)	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Department Table Data

Results Messages		
	DepartmentID	Dname
1	1	operations
2	2	Ops
3	3	Training
4	4	Training / education
5	5	Safety
6	6	Safety and Maintenance
7	7	Finance
8	8	Financial
9	9	Software
10	10	Software Services
11	11	Admiin
12	12	Admin
13	13	Finance Department
14	14	Financial Department
15	15	Front desk
16	16	Human resources
17	17	HR
18	18	HumanResources
19	19	humn resource

Employee Table

DESKTOP-OSTO0J1\...m - dbo.Employee SQLQuery6.sql - D...OSTO0			
	Column Name	Data Type	Allow Nulls
PK	EmployeeID	int	<input type="checkbox"/>
	FirstName	nvarchar(50)	<input checked="" type="checkbox"/>
	LastName	nvarchar(50)	<input checked="" type="checkbox"/>
	AddressID	int	<input checked="" type="checkbox"/>
	Salary	float	<input checked="" type="checkbox"/>
	PositionID	int	<input checked="" type="checkbox"/>
	DepartmentID	int	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Employee Table Data

Results		Messages					
	EmployeeID	FirstName	LastName	AddressID	Salary	PositionID	DepartmentID
1	1	Francoise	Rautenstrauch	1	36359	1	1
2	2	Kendra	Loud	2	40954	1	2
3	3	Lourdes	Bauswell	3	40926	2	3
4	4	Hannah	Edmison	4	44077	2	4
5	5	Tom	Loeza	5	43545	3	5
6	6	Queenie	Kramarczyk	6	47833	3	6
7	7	Hui	Portaro	7	71552	4	7
8	8	Josefa	Opitz	8	105107	4	7
9	9	Lea	Steinhaus	9	77421	4	8
10	10	Paola	Vielma	10	115908	4	7
11	11	Hortencia	Bresser	11	47153	5	7
12	12	Leanna	Tijerina	12	64667	5	7
13	13	Danilo	Pride	13	34736	6	9
14	14	Huey	Marcille	14	36624	7	10
15	15	Apolonia	Wame	15	51681	8	11
16	16	Chandra	Lagos	16	62893	9	12
17	17	Crissy	Pacholec	17	136819	10	13
18	18	Gianna	Branin	18	196144	10	14
19	19	Valentin	Billa	19	35944	11	15

Employee Skills Table

DESKTOP-OST00J1\S...o.Employee_Skills SQLQuery7.sql - D...OST00J1			
	Column Name	Data Type	Allow Nulls
▶ 🔑	EmployeeID	int	<input type="checkbox"/>
🔑	SkillID	int	<input type="checkbox"/>
			<input type="checkbox"/>

Employee Skills Table Data

Results Messages		
	EmployeeID	SkillID
1	1	2
2	2	2
3	3	2
4	4	2
5	5	2
6	6	2
7	7	2
8	8	2
9	9	2
10	10	2
11	11	2
12	12	2
13	13	2
14	14	2
15	15	2
16	16	2
17	17	1
18	17	2
19	18	1

Position Table

DESKTOP-OSTO0J1\...mm - dbo.Position X SQLQuery8.sql - D...OSTO0			
	Column Name	Data Type	Allow Nulls
PK	PositionID	int	<input type="checkbox"/>
	P_Title	nvarchar(50)	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Position Table Data

Results		Messages
	PositionID	P_Title
1	1	Engineer
2	2	education
3	3	Accounts clerk
4	4	Stats Clerk
5	5	clerk
6	6	Actuary
7	7	Advertising manager
8	8	process worker
9	9	Accountant
10	10	Administration
11	11	Admin 3rd Level
12	12	safety worker
13	13	admin level 1
14	14	Admini Assist
15	15	junior anaylst
16	16	admin level 2
17	17	Media planner
18	18	Junior analyst
19	19	Admin Level 3

Product Table

DESKTOP-OSTO0J1\...mm - dbo.Product			
	Column Name	Data Type	Allow Nulls
▶	ProductID	int	<input type="checkbox"/>
	ProductName	nvarchar(200)	<input checked="" type="checkbox"/>
	Price	float	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Product Table Data

Results		Messages	
	ProductID	ProductName	Price
1	1	paper toffee	20.26
2	2	GummyWire	14.99
3	3	car battery	45.53
4	4	Gummy wire	14.99
5	5	automobile model	80.63
6	6	Gummy-wire	14.99
7	7	carbattery	45.53
8	8	Model train kit	99
9	9	red wine	56.77
10	10	auto model	80.63
11	11	waterpark week-end pass	55
12	12	waterpark weekend pass	55
13	13	toy soldiers	25
14	14	Gummy wire	14.99
15	15	car batt	45.53
16	16	Gummy	14.99
17	17	airplane kit	156.3
18	18	RED wine	56.77
19	19	airplane model kit	156.3

Purchases Table

DESKTOP-OSTO0J1\...m - dbo.Purchases SQLQuery10.sql - ...OSTO0J1			
	Column Name	Data Type	Allow Nulls
1	PurchaseID	int	<input type="checkbox"/>
2	CustomerID	int	<input checked="" type="checkbox"/>
3	ProductID	int	<input checked="" type="checkbox"/>
4	[Purchase Date]	datetime	<input checked="" type="checkbox"/>
5	[Delivery Date]	datetime	<input checked="" type="checkbox"/>
6			<input type="checkbox"/>

Purchases Table Data

Results Messages					
	PurchaseID	CustomerID	ProductID	Purchase Date	Delivery Date
1	1	1	1	2016-01-22 00:00:00.000	2016-02-14 00:00:00.000
2	2	1	2	2016-03-03 00:00:00.000	2016-03-03 00:00:00.000
3	3	1	3	2016-06-09 00:00:00.000	2016-06-09 00:00:00.000
4	4	1	4	2016-08-30 00:00:00.000	2016-09-20 00:00:00.000
5	5	1	5	2016-11-07 00:00:00.000	2016-12-22 00:00:00.000
6	6	2	6	2016-01-21 00:00:00.000	2016-02-13 00:00:00.000
7	7	2	7	2016-02-22 00:00:00.000	2016-02-22 00:00:00.000
8	8	2	8	2016-06-09 00:00:00.000	2016-07-01 00:00:00.000
9	9	2	9	2016-08-24 00:00:00.000	2016-09-12 00:00:00.000
10	10	2	10	2016-11-05 00:00:00.000	2016-12-20 00:00:00.000
11	11	3	11	2016-01-23 00:00:00.000	2016-02-16 00:00:00.000
12	12	3	12	2016-03-06 00:00:00.000	2016-03-06 00:00:00.000
13	13	3	3	2016-06-10 00:00:00.000	2016-06-10 00:00:00.000
14	14	3	13	2016-09-07 00:00:00.000	2016-10-18 00:00:00.000
15	15	3	3	2016-11-12 00:00:00.000	2016-12-19 00:00:00.000
16	16	4	14	2016-01-21 00:00:00.000	2016-02-05 00:00:00.000
17	17	4	1	2016-02-22 00:00:00.000	2016-03-26 00:00:00.000
18	18	4	9	2016-06-07 00:00:00.000	2016-06-26 00:00:00.000
19	19	4	14	2016-08-18 00:00:00.000	2016-09-07 00:00:00.000

Skills Table

DESKTOP-OSTO0J1\S...comm - dbo.Skills - SQLQuery11.sql - ...OSTO0J1			
	Column Name	Data Type	Allow Nulls
▶	SkillID	int	<input type="checkbox"/>
	SkillName	nvarchar(50)	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Skills Table Data

Results Messages		
	SkillID	SkillName
1	1	Marketing
2	2	Operations
3	3	Accounting

Tax Table

DESKTOP-OSTO0J1\...Ecomm - dbo.TAX - SQLQuery12.sql - ...OSTO0J1			
	Column Name	Data Type	Allow Nulls
▶	ProvinceCode	nvarchar(20)	<input checked="" type="checkbox"/>
	TaxRate	float	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Tax Table Data

Results Messages		
	ProvinceCode	TaxRate
1	ON	11
2	NB	10
3	BC	12
4	QC	5
5	SK	12
6	NS	8
7	AB	5

Oracle Tables Screenshot

Live SQL

Feedback Help nadiral511@gmail.com

Home

SQL Worksheet

My Session

Schema

Quick SQL

My Scripts

My Tutorials

Code Library

Schema

Search Database Objk

Schema: My Schema

Sort By: Name

Options: Primary Objects Primary and Subordinate

Reset Search

ADDRESS

Table Status: Valid Created 15 minutes ago

CUSTOMER

Table Status: Valid Created 15 minutes ago

DEPARTMENT

Table Status: Valid Created 15 minutes ago

EMPLOYEE_SKILLS

Table Status: Valid Created 15 minutes ago

Employee

Table Status: Valid Created 15 minutes ago

POSITION

Table Status: Valid Created 15 minutes ago

PRODUCT

Table Status: Valid Created 15 minutes ago

PURCHASES

Table Status: Valid Created 14 minutes ago

SKILLS

Table Status: Valid Created 15 minutes ago

Address Table

Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	AddressID	NUMBER	22		0	No		
2	Address	VARCHAR2	200			Yes	Byte	
3	City	VARCHAR2	100			Yes	Byte	
4	PostalCode	VARCHAR2	10			Yes	Byte	
5	State	VARCHAR2	100			Yes	Byte	
6	Country	VARCHAR2	100			Yes	Byte	

Address Data

AddressID	Address	City	PostalCode	State	Country
1	2335 Canton Hwy #6	Windsor	N8N 3N2	ON	-
2	6 Arch St #9757	Alcida	E8J 2C4	NB	-
3	9547 Belmont Rd #21	Belleville	K8P 1B3	ON	-
4	73 Pittsford Victor Rd	Vancouver	V5Z 3K2	BC	-
5	447 Commercial St Se	LIile-Perrot	J7V 4T4	QC	-
6	47 Garfield Ave	Swift Current	S9H 4V2	SK	-
7	3 Mill Rd	Baker Brook	E7A 1T3	NB	-
8	136 W Grand Ave #3	Delhi	N4B 1C4	ON	-
9	80 Maplewood Dr #34	Bradford	L3Z 2S4	ON	-
10	58 Hancock St	Aurora	L4G 2J7	ON	-
11	808 Calle De Industrias	New Waterford	B1H 1Z4	NS	-
12	2859 Dorsett Rd	North York	M9L 2T9	ON	-
13	6857 Wall St	Red Deer	T4R 2H5	AB	-
14	169 Journal Sq	Edmonton	T5P 1G9	AB	-
15	3 E 31st St #77	Fredericton	E3G 0A3	NB	-
16	7 N Dean St	Etobicoke	M8Z 3P6	ON	-
17	85 S State St	Barrie	L4N 6T7	ON	-

Customer Table

Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	CustomerID	NUMBER	22		0	No		
2	EmployeeID	NUMBER	22		0	Yes		
3	AddressID	NUMBER	22		0	Yes		
4	CustomerName	VARCHAR2	200			Yes	Byte	

Customer Table Data

CustomerID	EmployeeID	AddressID	CustomerName
1	-	41	Adams Balcom & Larose Pc Blanche Dundas
2	-	42	All Brevard Cert Apprsls Inc George Brane
3	-	43	Barry, Anthony S Esq Lori Beggon
4	-	44	Cgi Systems Inc Cristopher Pakalec
5	-	45	Andy Christer
6	-	46	Danny Proud
7	-	47	Felton Yafer
8	-	48	Lyle Fuccate

Department Table

Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	DepartmentID	NUMBER	22		0	No		
2	Dname	VARCHAR2	50			Yes	Byte	

Department Table Data

DepartmentID	Dname
1	operations
2	Ops
3	Training
4	Training / education
5	Safety

Position Table

Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	PositionID	NUMBER	22		0	No		
2	P_Title	VARCHAR2	50			Yes	Byte	

Position Table Data

PositionID	P_Title
1	Engineer
3	Accounts clerk
4	Stats Clerk
5	clerk
6	Actuary
7	Advertising manager
8	process worker
9	Accountant
10	Administration
11	Admin 3rd Level
12	safety worker
13	admin level 1
14	Admini Assist
15	junior anaylst
16	admin level 2
17	Media planner
18	Junior analyst

Product Table

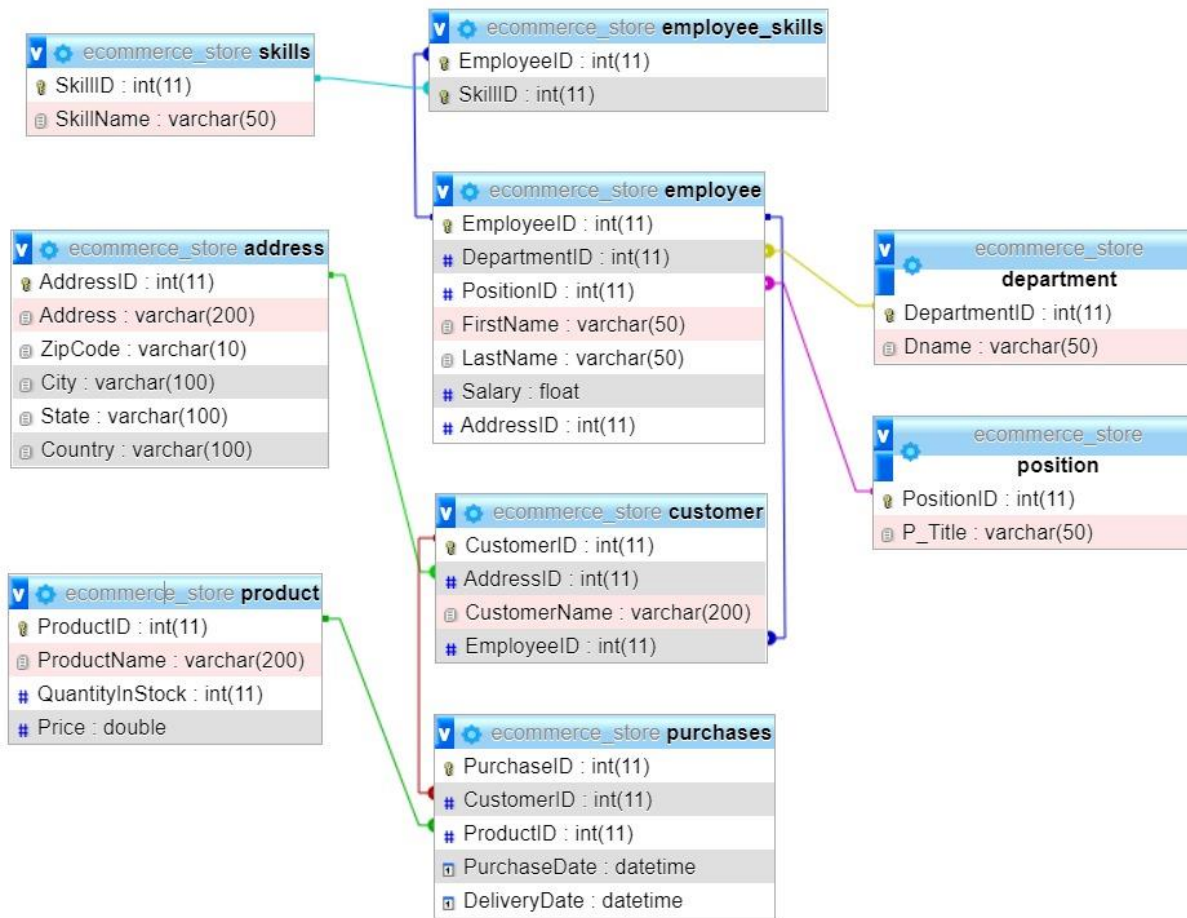
Columns								
#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	ProductID	NUMBER	22		0	No		
2	ProductName	VARCHAR2	200			Yes	Byte	
3	Price	FLOAT	22	126		Yes		
4	QuantityInStock	NUMBER	22		0	Yes		

Product Table Data

ProductID	ProductName	Price
1	paper toffee	20.26
2	GummyWire	14.99
3	car battery	45.53
4	Gummy wire	14.99
5	automobile model	80.63
6	Gummy-wire	14.99
7	carbattery	45.53
8	Model train kit	99
9	red wine	56.77
10	auto model	80.63
11	waterpark week-end pass	55
12	waterpark weekend pass	55
13	toy soldiers	25
14	Gummy wire	14.99
15	car batt	45.53
16	Gummy	14.99
17	airplane kit	156.3

MySQL

MySQL Table



Address Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	AddressID	int(11)		No	None			Change Drop More
<input type="checkbox"/>	2	Address	varchar(200)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	3	PostalCode	varchar(10)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	4	City	varchar(100)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	5	State	varchar(100)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	6	Country	varchar(100)	utf8mb4_general_ci	Yes	NULL			Change Drop More

Address Table Data

<div><div><div>←</div><div>→</div></div></div>				▼	AddressID	Address	PostalCode	City	State	Country		
<input type="checkbox"/>		Edit		Copy		Delete	1	2335 Canton Hwy #6	N8N 3N2	Windsor	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	2	6 Arch St #9757	E8J 2C4	Alcida	NB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	3	9547 Belmont Rd #21	K8P 1B3	Belleville	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	4	73 Pittsford Victor Rd	V5Z 3K2	Vancouver	BC	NULL
<input type="checkbox"/>		Edit		Copy		Delete	5	447 Commercial St Se	J7V 4T4	Llle-Perrot	QC	NULL
<input type="checkbox"/>		Edit		Copy		Delete	6	47 Garfield Ave	S9H 4V2	Swift Current	SK	NULL
<input type="checkbox"/>		Edit		Copy		Delete	7	3 Mill Rd	E7A 1T3	Baker Brook	NB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	8	136 W Grand Ave #3	N4B 1C4	Delhi	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	9	80 Maplewood Dr #34	L3Z 2S4	Bradford	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	10	58 Hancock St	L4G 2J7	Aurora	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	11	808 Calle De Industrias	B1H 1Z4	New Waterford	NS	NULL
<input type="checkbox"/>		Edit		Copy		Delete	12	2859 Dorsett Rd	M9L 2T9	North York	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	13	6857 Wall St	T4R 2H5	Red Deer	AB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	14	169 Journal Sq	T5P 1G9	Edmonton	AB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	15	3 E 31st St #77	E3G 0A3	Fredericton	NB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	16	7 N Dean St	M8Z 3P6	Etobicoke	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	17	85 S State St	L4N 6T7	Barrie	ON	NULL
<input type="checkbox"/>		Edit		Copy		Delete	18	100 Main St	T2K 4X5	Calgary	AB	NULL
<input type="checkbox"/>		Edit		Copy		Delete	19	6185 Bohn St #72	S0C 2C0	Pangman	SK	NULL
<input type="checkbox"/>		Edit		Copy		Delete	20	2 Sutton Pl S #5727	J9X 3V4	Rouyn-Noranda	QC	NULL
<input type="checkbox"/>		Edit		Copy		Delete	21	1534 Sidco Dr	T9E 5A6	Leduc	AB	NULL

Customer Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	CustomerID	int(11)			No	None			Change Drop More
2	AddressID	int(11)			Yes	NULL			Change Drop More
3	CustomerName	varchar(200)	utf8mb4_general_ci		Yes	NULL			Change Drop More
4	EmployeeID	int(11)			Yes	NULL			Change Drop More

Customer Table Data

	CustomerID	AddressID	CustomerName	EmployeeID
Edit Copy Delete	1	41	Adams Balcom & Larose Pc	Blanche Dundas
Edit Copy Delete	2	42	All Brevard Cert Apprsls Inc	George Brane
Edit Copy Delete	3	43	Barry, Anthony S Esq	Lori Beggon
Edit Copy Delete	4	44	Cgi Systems Inc	Cristopher Pakalec
Edit Copy Delete	5	45	Andy Christer	
Edit Copy Delete	6	46	Danny Proud	
Edit Copy Delete	7	47	Felton Yafer	
Edit Copy Delete	8	48	Lyle Fuccate	
Edit Copy Delete	9	49	General Color Co Inc	Valentino Bullum
Edit Copy Delete	10	50	Judy, Henry L Esq	Laura Randalle
Edit Copy Delete	11	51	Corrie Kardell	
Edit Copy Delete	12	52	Kitchen People	Aphollo Wayne
Edit Copy Delete	13	53	Leanna Tijerina	
Edit Copy Delete	14	54	Meredith Realty Group Inc	Chandra Lagotte
Edit Copy Delete	15	55	Mershon Metal Specialties Inc	Willard White
Edit Copy Delete	16	56	Lisa Michelle	
Edit Copy Delete	17	57	Kim Rabu	
Edit Copy Delete	18	58	Southern Idaho Pipe & Stl Corp	Huey Market
Edit Copy Delete	19	59	Holly Standman	
Edit Copy Delete	20	60	Tish Purple	























Department Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	DepartmentID	int(11)			No	None			Change Drop More
2	Dname	varchar(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More





























































Department Table Data

				DepartmentID	Dname
<input type="checkbox"/>	Edit	Copy	Delete	1	operations
<input type="checkbox"/>	Edit	Copy	Delete	2	Ops
<input type="checkbox"/>	Edit	Copy	Delete	3	Training
<input type="checkbox"/>	Edit	Copy	Delete	4	Training / education
<input type="checkbox"/>	Edit	Copy	Delete	5	Safety
<input type="checkbox"/>	Edit	Copy	Delete	6	Safety and Maintenance
<input type="checkbox"/>	Edit	Copy	Delete	7	Finance
<input type="checkbox"/>	Edit	Copy	Delete	8	Financial
<input type="checkbox"/>	Edit	Copy	Delete	9	Software
<input type="checkbox"/>	Edit	Copy	Delete	10	Software Services
<input type="checkbox"/>	Edit	Copy	Delete	11	Admiin
<input type="checkbox"/>	Edit	Copy	Delete	12	Admin
<input type="checkbox"/>	Edit	Copy	Delete	13	Finance Department
<input type="checkbox"/>	Edit	Copy	Delete	14	Financial Department
<input type="checkbox"/>	Edit	Copy	Delete	15	Front desk
<input type="checkbox"/>	Edit	Copy	Delete	16	Human resources












Employee Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	EmployeeID 	int(11)			No	None			 Change  Drop  More
2	DepartmentID 	int(11)			Yes	NULL			 Change  Drop  More
3	PositionID 	int(11)			Yes	NULL			 Change  Drop  More
4	FirstName	varchar(50)	utf8mb4_general_ci		Yes	NULL			 Change  Drop  More
5	LastName	varchar(50)	utf8mb4_general_ci		Yes	NULL			 Change  Drop  More
6	Salary	float			Yes	NULL			 Change  Drop  More
7	AddressID	int(11)			Yes	NULL			 Change  Drop  More


















































Employee Table Data

  		EmployeeID	DepartmentID	PositionID	FirstName	LastName	Salary	AddressID
<input type="checkbox"/>  Edit  Copy  Delete		1	1	1	Francoise	Rautenstrauch	36359	1
<input type="checkbox"/>  Edit  Copy  Delete		2	2	1	Kendra	Loud	40954	2
<input type="checkbox"/>  Edit  Copy  Delete		3	3	2	Lourdes	Bauswell	40926	3
<input type="checkbox"/>  Edit  Copy  Delete		4	4	2	Hannah	Edmison	44077	4
<input type="checkbox"/>  Edit  Copy  Delete		5	5	3	Tom	Loeza	43545	5
<input type="checkbox"/>  Edit  Copy  Delete		6	6	3	Queenie	Kramarczyk	47833	6
<input type="checkbox"/>  Edit  Copy  Delete		7	7	4	Hui	Portaro	71552	7
<input type="checkbox"/>  Edit  Copy  Delete		8	7	4	Josefa	Opitz	105107	8
<input type="checkbox"/>  Edit  Copy  Delete		9	8	4	Lea	Steinhaus	77421	9
<input type="checkbox"/>  Edit  Copy  Delete		10	7	4	Paola	Vielma	115908	10
<input type="checkbox"/>  Edit  Copy  Delete		11	7	5	Hortencia	Bresser	47153	11
<input type="checkbox"/>  Edit  Copy  Delete		12	7	5	Leanna	Tijerina	64667	12
<input type="checkbox"/>  Edit  Copy  Delete		13	9	6	Danilo	Pride	34736	13
<input type="checkbox"/>  Edit  Copy  Delete		14	10	7	Huey	Marcille	36624	14
<input type="checkbox"/>  Edit  Copy  Delete		15	11	8	Apolonia	Warne	51681	15
<input type="checkbox"/>  Edit  Copy  Delete		16	12	9	Chandra	Lagos	62893	16
<input type="checkbox"/>  Edit  Copy  Delete		17	13	10	Crissy	Pacholec	136819	17
<input type="checkbox"/>  Edit  Copy  Delete		18	14	10	Gianna	Branin	196144	18
<input type="checkbox"/>  Edit  Copy  Delete		19	15	11	Valentin	Billa	35944	19
<input type="checkbox"/>  Edit  Copy  Delete		20	15	12	Ilona	Dudash	43983	20
<input type="checkbox"/>  Edit  Copy  Delete		21	2	13	Willard	Lablanc	43604	21
<input checked="" type="checkbox"/> Console  Edit  Copy  Delete		22	1	14	Lauryn	Randol	45784	22

Product Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	ProductID 	int(11)			No	None			 Change  Drop  More
2	ProductName	varchar(200)	utf8mb4_general_ci		Yes	NULL			 Change  Drop  More
3	QuantityInStock	int(11)			Yes	NULL			 Change  Drop  More
4	Price	double			Yes	NULL			 Change  Drop  More

Product Table Data

		ProductID	ProductName	QuantityInStock	Price
<input type="checkbox"/>	 Edit  Copy  Delete	1	paper toffee	NULL	20.26
<input type="checkbox"/>	 Edit  Copy  Delete	2	GummyWire	NULL	14.99
<input type="checkbox"/>	 Edit  Copy  Delete	3	car battery	NULL	45.53
<input type="checkbox"/>	 Edit  Copy  Delete	4	Gummy wire	NULL	14.99
<input type="checkbox"/>	 Edit  Copy  Delete	5	automobile model	NULL	80.63
<input type="checkbox"/>	 Edit  Copy  Delete	6	Gummy-wire	NULL	14.99
<input type="checkbox"/>	 Edit  Copy  Delete	7	carbattery	NULL	45.53
<input type="checkbox"/>	 Edit  Copy  Delete	8	Model train kit	NULL	99
<input type="checkbox"/>	 Edit  Copy  Delete	9	red wine	NULL	56.77
<input type="checkbox"/>	 Edit  Copy  Delete	10	auto model	NULL	80.63
<input type="checkbox"/>	 Edit  Copy  Delete	11	waterpark week-end pass	NULL	55
<input type="checkbox"/>	 Edit  Copy  Delete	12	waterpark weekend pass	NULL	55
<input type="checkbox"/>	 Edit  Copy  Delete	13	toy soldiers	NULL	25
<input type="checkbox"/>	 Edit  Copy  Delete	14	Gummy wire	NULL	14.99
<input type="checkbox"/>	 Edit  Copy  Delete	15	car batt	NULL	45.53
<input type="checkbox"/>	 Edit  Copy  Delete	16	Gummy	NULL	14.99

Skills Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SkillID	int(11)			No	None			Change Drop More
2	SkillName	varchar(50)	utf8mb4_general_ci		Yes	NULL			Change Drop More

Skills Table Data

				SkillID	SkillName
	Edit	Copy	Delete	1	Marketing
	Edit	Copy	Delete	2	Operations
	Edit	Copy	Delete	3	Accounting

Microsoft SQL Server Code

```
CREATE TABLE [ADDRESS] (
    [AddressID] int,
    [Address] varchar(200),
    [ZipCode] varchar(10),
    [City] varchar(100),
    [State] varchar(100),
    [Country] varchar(100),
    PRIMARY KEY ([AddressID])
);
CREATE TABLE [POSITION] (
    [PositionID] int,
    [P_Title] varchar(50),
    PRIMARY KEY ([PositionID])
);
CREATE TABLE [DEPARTMENT] (
    [DepartmentID] int,
    [Dname] varchar(50),
    PRIMARY KEY ([DepartmentID])
);
CREATE TABLE [SKILLS] (
    [SkillID] int,
    [SkillName] varchar(50),
    PRIMARY KEY ([SkillID])
);
CREATE TABLE [PRODUCT] (
    [ProductID] int,
    [ProductName] varchar(200),
    [QuantityInStock] int,
    [Price] float,
    PRIMARY KEY ([ProductID])
);
CREATE TABLE [Employee] (
    [EmployeeID] int,
    [DepartmentID] int FOREIGN KEY REFERENCES DEPARTMENT(DepartmentID),
    [PositionID] int FOREIGN KEY REFERENCES POSITION(PositionID),
    [FirstName] varchar(50),
    [LastName] varchar(50),
    [Salary] float,
    [AddressID] int FOREIGN KEY REFERENCES ADDRESS(AddressID),
    PRIMARY KEY ([EmployeeID])
);
CREATE TABLE [CUSTOMER] (
    [CustomerID] int,
    [AddressID] int FOREIGN KEY REFERENCES ADDRESS(AddressID),
    [CustomerName] varchar(200),
    [EmployeeID] int FOREIGN KEY REFERENCES Employee(EmployeeID),
    PRIMARY KEY ([CustomerID])
);
CREATE TABLE [EMPLOYEE_SKILLS] (
    [EmployeeID] int FOREIGN KEY REFERENCES Employee(EmployeeID),
    [SkillID] int FOREIGN KEY REFERENCES SKILLS(SkillID),
    PRIMARY KEY ([EmployeeID], [SkillID])
);
```


);

```
CREATE TABLE [PURCHASES] (  
    [PurchaseID] int,  
    [CustomerID] int FOREIGN KEY REFERENCES CUSTOMER(CustomerID),  
    [ProductID] int FOREIGN KEY REFERENCES PRODUCT(ProductID),  
    [PurchaseDate] datetime,  
    [DeliveryDate] datetime,  
    PRIMARY KEY ([PurchaseID])  
);
```

MySQL Code

```
CREATE TABLE ADDRESS (
  `AddressID` int,
  `Address` varchar(200),
  `ZipCode` varchar(10),
  `City` varchar(100),
  `State` varchar(100),
  `Country` varchar(100),
  PRIMARY KEY (`AddressID`)
);
CREATE TABLE POSITION (
  `PositionID` int,
  `P_Title` varchar(50),
  PRIMARY KEY (`PositionID`)
);
CREATE TABLE DEPARTMENT (
  `DepartmentID` int,
  `Dname` varchar(50),
  PRIMARY KEY (`DepartmentID`)
);
CREATE TABLE SKILLS (
  `SkillID` int,
  `SkillName` varchar(50),
  PRIMARY KEY (`SkillID`)
);
CREATE TABLE PRODUCT (
  `ProductID` int,
  `ProductName` varchar(200),
  `QuantityInStock` int,
  `Price` double,
  PRIMARY KEY (`ProductID`)
);
CREATE TABLE Employee (
  `EmployeeID` int,
  `DepartmentID` int,
  `PositionID` int,
  `FirstName` varchar(50),
  `LastName` varchar(50),
  `Salary` float,
  `AddressID` int,
  PRIMARY KEY (`EmployeeID`),
  FOREIGN KEY (DepartmentID) REFERENCES `DEPARTMENT` (DepartmentID),
  FOREIGN KEY (PositionID) REFERENCES `POSITION` (PositionID)
);
CREATE TABLE CUSTOMER (
  `CustomerID` int,
  `AddressID` int,
  `CustomerName` varchar(200),
  `EmployeeID` int,
  PRIMARY KEY (`CustomerID`),
  FOREIGN KEY (AddressID) REFERENCES `ADDRESS` (AddressID),
  FOREIGN KEY (EmployeeID) REFERENCES `Employee` (EmployeeID)
);
```

```
CREATE TABLE EMPLOYEE_SKILLS (  
  `EmployeeID` int,  
  `SkillID` int,  
  PRIMARY KEY (`EmployeeID`, `SkillID`),  
  FOREIGN KEY (EmployeeID) REFERENCES `Employee` (EmployeeID),  
  FOREIGN KEY (SkillID) REFERENCES `SKILLS` (SkillID)  
);
```

```
CREATE TABLE PURCHASES (  
  `PurchaseID` int,  
  `CustomerID` int,  
  `ProductID` int ,  
  `PurchaseDate` datetime,  
  `DeliveryDate` datetime,  
  PRIMARY KEY (`PurchaseID`),  
  FOREIGN KEY (CustomerID) REFERENCES `CUSTOMER` (CustomerID),  
  FOREIGN KEY (ProductID) REFERENCES `PRODUCT` (ProductID)  
);
```

Oracle Code

```
CREATE TABLE "Employee" (  
    "EmployeeID" int,  
    "DepartmentID" int,  
    "PositionID" int,  
    "FirstName" varchar(50),  
    "LastName" varchar(50),  
    "Salary" float,  
    "AddressID" int,  
    PRIMARY KEY ("EmployeeID")  
);  
  
CREATE TABLE "POSITION" (  
    "PositionID" int,  
    "P_Title" varchar(50),  
    PRIMARY KEY ("PositionID")  
);  
  
CREATE TABLE "SKILLS" (  
    "SkillID" int,  
    "SkillName" varchar(50),  
    PRIMARY KEY ("SkillID")  
);  
  
CREATE TABLE "EMPLOYEE_SKILLS" (  
    "EmployeeID" int,  
    "SkillID" int,  
    PRIMARY KEY ("EmployeeID", "SkillID")  
);  
  
CREATE TABLE "DEPARTMENT" (  
    "DepartmentID" int,  
    "Dname" varchar(50),  
    PRIMARY KEY ("DepartmentID")  
);  
  
CREATE TABLE "CUSTOMER" (  
    "CustomerID" int,  
    "EmployeeID" int,  
    "AddressID" int,  
    "CustomerName" varchar(200),  
    PRIMARY KEY ("CustomerID")  
);  
  
CREATE TABLE "ADDRESS" (  
    "AddressID" int,  
    "Address" varchar(200),  
    "City" varchar(100),  
    "PostalCode" varchar(10),  
    "State" varchar(100),  
    "Country" varchar(100),  
    PRIMARY KEY ("AddressID")  
);  
  
CREATE TABLE "PRODUCT" (  
    "ProductID" int,  
    "ProductName" varchar(50),  
    "Price" float,  
    "Category" varchar(50),  
    PRIMARY KEY ("ProductID")  
);
```

```
    "ProductID" int,  
    "ProductName" varchar(200),  
    "Price" float,  
    "QuantityInStock" int,  
    PRIMARY KEY ("ProductID")  
);
```

```
CREATE TABLE "PURCHASES" (  
    "PurchaseID" int,  
    "CustomerID" int,  
    "ProductID" int,  
    "PurchaseDate" datetime,  
    "DeliveryDate" datetime,  
    PRIMARY KEY ("PurchaseID")  
);
```