Employee

EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project

ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo

ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee
EmpNo	CHAR(3)
EmpName	VARCHAR(12)

Project
ProjNo	CHAR(7)
ProjDesc	VARCHAR(20)
Supervisor	CHAR(3)

AssignedTo
ProjNo	CHAR(7)
EmpNo	CHAR(3)

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

 EmpNo CHAR(3)

 EmpName VARCHAR(12)

Project

 ProjNo CHAR(7)

 ProjDesc VARCHAR(20)

 Supervisor CHAR(3)

AssignedTo

 ProjNo CHAR(7)

 EmpNo CHAR(3)

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

 EmpNo CHAR(3) Primary key

 EmpName VARCHAR(12)

Project

 ProjNo CHAR(7)

 ProjDesc VARCHAR(20)

 Supervisor CHAR(3)

AssignedTo

 ProjNo CHAR(7)

 EmpNo CHAR(3)

Employee		Project			AssignedTo	
EmpNo	EmpName	ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones	COMP231	Mobile App	107	COMP453	101
103	Smith	COMP278	Web Service	110	COMP354	103
104	Clark	COMP353	Database	104	COMP353	104
106	Byron	COMP354	OS	110	COMP453	104
107	Evans	COMP453	Database	101	COMP231	106
110	Drew				COMP278	106
112	Smith				COMP353	106
					COMP354	106
					COMP231	107
					COMP353	107
					COMP278	110
					COMP354	110
					COMP354	112
					COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)
ProjDesc	VARCHAR(20)
Supervisor	CHAR(3)

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Employee	
EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project		
ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo	
ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Employee

EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project

ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo

ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Employee

EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project

ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo

ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)	Primary key?
EmpNo	CHAR(3)	

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	**COMP453**	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	**COMP453**	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

EmpNo   CHAR(3)   Primary key

EmpName   VARCHAR(12)

Project

ProjNo   CHAR(7)   Primary key

ProjDesc   VARCHAR(20)

Supervisor   CHAR(3)

AssignedTo

ProjNo   CHAR(7)   Primary key?

EmpNo   CHAR(3)

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	**COMP453**	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	**COMP453**	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

ProjNo can't be primary key

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)	Primary key?
EmpNo	CHAR(3)	

Employee			Project				AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor		ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107		COMP453	101
103	Smith		COMP278	Web Service	110		COMP354	103
104	Clark		COMP353	Database	104		COMP353	104
106	Byron		COMP354	OS	110		COMP453	104
107	Evans		COMP453	Database	101		COMP231	106
110	Drew						COMP278	106
112	Smith						COMP353	106
							COMP354	106
							COMP231	107
							COMP353	107
							COMP278	110
							COMP354	110
							COMP354	112
							COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)	
EmpNo	CHAR(3)	Primary key?

Employee	
EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project		
ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo	
ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	**104**
COMP453	**104**
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)	
EmpNo	CHAR(3)	Primary key?

Employee	
EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project		
ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo	
ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	**104** ← EmpNo can't be primary key
COMP453	**104** ←
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo   CHAR(3)   Primary key

EmpName   VARCHAR(12)

Project

ProjNo   CHAR(7)   Primary key

ProjDesc   VARCHAR(20)

Supervisor   CHAR(3)

AssignedTo

ProjNo   CHAR(7)

EmpNo   CHAR(3)   Primary key?

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Can both attributes together be a compound primary key?

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Can both attributes together be a compound primary key? Yes!

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)	
EmpNo	CHAR(3)	

Both attributes together are a compound primary key

Employee

EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project

ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo

ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present
    Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

    Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

One notation – underline the attributes that together are a compound primary key

Employee	
EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project		
ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo	
ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Employee			Project			AssignedTo	
EmpNo	EmpName		ProjNo	ProjDesc	Supervisor	ProjNo	EmpNo
101	Jones		COMP231	Mobile App	107	COMP453	101
103	Smith		COMP278	Web Service	110	COMP354	103
104	Clark		COMP353	Database	104	COMP353	104
106	Byron		COMP354	OS	110	COMP453	104
107	Evans		COMP453	Database	101	COMP231	106
110	Drew					COMP278	106
112	Smith					COMP353	106
						COMP354	106
						COMP231	107
						COMP353	107
						COMP278	110
						COMP354	110
						COMP354	112
						COMP453	112

Relations Present

Employee

EmpNo	CHAR(3)	Primary key
EmpName	VARCHAR(12)	

Project

ProjNo	CHAR(7)	Primary key
ProjDesc	VARCHAR(20)	
Supervisor	CHAR(3)	

AssignedTo

ProjNo	CHAR(7)
EmpNo	CHAR(3)

Alternative notation - a separate entry indicating the primary key and the attribute(s) that comprise it primary key

Employee

EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project

ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo

ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present
Employee
EmpNo   CHAR(3)   Primary key
EmpName   VARCHAR(12)

Project
ProjNo   CHAR(7)   Primary key
ProjDesc   VARCHAR(20)
Supervisor CHAR(3)

AssignedTo
ProjNo   CHAR(7)
EmpNo   CHAR(3)
Primary key(ProjNo,EmpNo)

Employee	
EmpNo	EmpName
101	Jones
103	Smith
104	Clark
106	Byron
107	Evans
110	Drew
112	Smith

Project		
ProjNo	ProjDesc	Supervisor
COMP231	Mobile App	107
COMP278	Web Service	110
COMP353	Database	104
COMP354	OS	110
COMP453	Database	101

AssignedTo	
ProjNo	EmpNo
COMP453	101
COMP354	103
COMP353	104
COMP453	104
COMP231	106
COMP278	106
COMP353	106
COMP354	106
COMP231	107
COMP353	107
COMP278	110
COMP354	110
COMP354	112
COMP453	112

Relations Present

Employee

 EmpNo   CHAR(3)

 EmpName   VARCHAR(12)

 Primary key(EmpNo)

Project

 ProjNo   CHAR(7)

 ProjDesc   VARCHAR(20)

 Supervisor   CHAR(3)

 Primary key(ProjNo)

AssignedTo

 ProjNo   CHAR(7)

 EmpNo   CHAR(3)

 Primary key(ProjNo,EmpNo)

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present
Salesperson

Name	VARCHAR20)
Age	INT
Salary	INT

Customer

Name	VARCHAR(20)
City	VARCHAR(15)

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)
Age	INT
Salary	INT

Customer

Name	VARCHAR(20)
City	VARCHAR(15)

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)
Age	INT
Salary	INT

Based on the data shown, this could be a primary key

Customer

Name	VARCHAR(20)
City	VARCHAR(15)

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson				Customer	
Name	Age	Salary		Name	City
Abel	63	120000		Abernathy	Miami
Baker	38	42000		Broadway	Charlotte
Jones	22	36000		Office Pro	Charleston
Murphy	42	50000		Amalgamated	Charlotte
Smith	59	118000			
Abernathy	22	36000			

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

    Name   VARCHAR20)

    Age   INT

    Salary   INT

Customer

    Name   VARCHAR(20)

    City   VARCHAR(15)

Order

    Number   INT

    Salesperson VARCHAR(20)

    Customer   VARCHAR(20)

    Amount   INT

Based on the data shown, this could be a primary key
Is this a good idea?

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name   VARCHAR20)

Age   INT

Salary   INT

Customer

Name   VARCHAR(20)

City   VARCHAR(15)

Order

Number   INT

Salesperson   VARCHAR(20)

Customer   VARCHAR(20)

Amount   INT

Based on the data shown, this could be a primary key
Is this a good idea?
If chosen as the primary key, what does this mean?

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

We'll do it anyway

Relations Present

Salesperson

Name	VARCHAR20)	**Primary**
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)
City	VARCHAR(15)

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20) Primary
Age	INT
Salary	INT

Customer

Name	VARCHAR(20)
City	VARCHAR(15)

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson				Customer	
Name	Age	Salary		Name	City
Abel	63	120000		Abernathy	Miami
Baker	38	42000		Broadway	Charlotte
Jones	22	36000		Office Pro	Charleston
Murphy	42	50000		Amalgamated	Charlotte
Smith	59	118000			
Abernathy	22	36000			

Order			
Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)	Primary
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)	← Same issue as with Salesperson
City	VARCHAR(15)	

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson				Customer	
Name	Age	Salary		Name	City
Abel	63	120000		Abernathy	Miami
Baker	38	42000		Broadway	Charlotte
Jones	22	36000		Office Pro	Charleston
Murphy	42	50000		Amalgamated	Charlotte
Smith	59	118000			
Abernathy	22	36000			

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)	Primary
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)	**Primary**
City	VARCHAR(15)	

We'll do it anyway

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)	Primary
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)	Primary
City	VARCHAR(15)	

Order

Number	INT
Salesperson	VARCHAR(20)
Customer	VARCHAR(20)
Amount	INT

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)	Primary
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)	Primary
City	VARCHAR(15)	

Order

Number	INT	Can be a primary key
Salesperson	VARCHAR(20)	
Customer	VARCHAR(20)	
Amount	INT	

Salesperson

Name	Age	Salary
Abel	63	120000
Baker	38	42000
Jones	22	36000
Murphy	42	50000
Smith	59	118000
Abernathy	22	36000

Customer

Name	City
Abernathy	Miami
Broadway	Charlotte
Office Pro	Charleston
Amalgamated	Charlotte

Order

Number	Salesperson	Customer	Amount
100	Abernathy	Abernathy	560
200	Jones	Abernathy	2500
300	Abel	Broadway	480
400	Abel	Office Pro	2500
500	Murphy	Amalgamated	6000
600	Jones	Abernathy	7000
700	Jones	Abernathy	2500

Relations Present

Salesperson

Name	VARCHAR20)	Primary
Age	INT	
Salary	INT	

Customer

Name	VARCHAR(20)	Primary
City	VARCHAR(15)	

Order

Number	INT	Primary
Salesperson	VARCHAR(20)	
Customer	VARCHAR(20)	
Amount	INT	