



دانشکده مهندسی
کامپیوتر و فناوری اطلاعات

۱۳۹۷/۹/۲

گزارش پروژه اول اصول طراحی پایگاه داده

آریا وارسته نژاد



مقدمه

هدف از این تمرین، طراحی پایگاه داده مربوط به یک سیستم فروش اینترنتی محصولات به صورت MySQL است. در این سیستم فروشگاههای مختلف میتوانند ثبت شود که هر کدام از فروشگاهها دارای یک مدیر هستند. کاربران میتوانند در این سیستم ثبتنام کنند و کالاهای موردنیاز خود را تهیه نمایند.

قسمت اول

جداول را با توجه به اطلاعات زیر، در پایگاه داده به وسیله دستورهای MySQL ایجاد کنید.

Customer:

ID, Email, Password, FirstName, LastName, Sex, Credit, Cellphone, Address

Manager:

ID, Email, Password, FirstName, LastName, Sex, Cellphone, Address

Vendor:

ID, Title, City, ManagerID, Address, Phone

Order:

ID, VendorID, CustomerID, Status, PaymentType, CreatedAt, DeliveryAddress

Product:

ID, Title, Price

VendorProduct:

VendorID, ProductID, Amount

OrderProduct:

OrderID, ProductID, Amount



```
CREATE TABLE `Ap1`.`Customer` (  
  `ID` INT(4) NOT NULL,  
  `Email` VARCHAR(50),  
  `Password` INT(20),  
  `FirstName` VARCHAR(50),  
  `LastName` VARCHAR(50),  
  `Sex` VARCHAR(8),  
  `Credit` BIGINT(200),  
  `Cellphone` INT(8),  
  `Address` VARCHAR(100)  
);
```

```
CREATE TABLE `AP1`.`Manager` (  
  `ID` INT(4) NOT NULL,  
  `Email` VARCHAR(50),  
  `Password` INT(20),  
  `FirstName` VARCHAR(50),  
  `LastName` VARCHAR(50),  
  `Sex` VARCHAR(8),  
  `Cellphone` INT(11) ,  
  `Address` VARCHAR(100)  
);
```

```
CREATE TABLE `AP1`.`Vendor` (  
  `ID` INT(4) NOT NULL,  
  `Title` varchar(50),  
  `City` varchar(30),  
  `ManagerID` int(4),  
  `Address` VARCHAR(100),  
  `Phone` int(8)  
);
```



```
CREATE TABLE `Ap1`.`Order` (  
  `ID` INT(4) NOT NULL,  
  `VendorID` INT(4) NOT NULL,  
  `CustomerID` INT(4) NOT NULL,  
  `Status` VARCHAR(20) NOT NULL,  
  `PaymentType` VARCHAR(20) NOT NULL,  
  `CreatedAt` DATE,  
  `DeliveryAddress` VARCHAR(100)  
);
```

```
CREATE TABLE `ap1`.`Product` (  
  `ID` INT(4) NOT NULL,  
  `Title` VARCHAR(50),  
  `price` BIGINT(200)  
);
```

```
CREATE TABLE `ap1`.`VendorProduct` (  
  `venderid` INT(4) ,  
  `productid` INT(4),  
  `amount` INT(20)  
);
```

```
CREATE TABLE `ap1`.`OrderProduct` (  
  `OrderID` INT(4) ,  
  `productid` INT(4),  
  `amount` INT(20)  
);
```



کلیدهای اصلی و خارجی را مشخص کنید.

کلید های اصلی در شمای رابطه ای با رنگ زرد متمایز شده اند.

کوئری های محدودیت کلید های اصلی:

```
ALTER TABLE `manager` ADD PRIMARY KEY(`ID`);
```

```
ALTER TABLE `vendor` ADD PRIMARY KEY(`ID`);
```

```
ALTER TABLE `orders` ADD PRIMARY KEY(`ID`);
```

```
ALTER TABLE `product` ADD PRIMARY KEY(`ID`);
```

```
ALTER TABLE `VENDORproduct` ADD PRIMARY KEY(`productid`,`Venderid`);
```

```
ALTER TABLE `OrderProduct` ADD PRIMARY KEY(`OrderID`,`ProductID`);
```

کوئری های محدودیت کلید های خارجی:

```
ALTER TABLE Orders  
ADD FOREIGN KEY (CustomerID)  
REFERENCES CUSTOMER(ID);
```



```
ALTER TABLE vendorproduct  
ADD FOREIGN KEY (venderid)  
REFERENCES vendor(ID);
```

```
ALTER TABLE vendorproduct  
ADD FOREIGN KEY (productid)  
REFERENCES product(ID);
```

```
ALTER TABLE orderproduct  
ADD FOREIGN KEY (OrderID)  
REFERENCES orders(ID);
```

```
ALTER TABLE orderproduct  
ADD FOREIGN KEY (productid)  
REFERENCES product(ID);
```

قسمت دوم

با توجه به کوئریهای قسمت سوم، جداول را پر کنید.

```
INSERT INTO Customer  
VALUES(0,'sqfghwda@sas.com',2000,'sina','hamidi','male',178000000,09128966548,  
'velenjak');  
  
INSERT INTO Customer  
VALUES(1,'qhwe@gmail.com',4231,'amir','varaste','male',12023000,09211212122,'t  
ehransar');  
  
INSERT INTO Customer
```



```
VALUES(2,'ewfghe@gmail.com',5443,'arya','sajjadi','male',102346000,09123456789,'satarkhan');

INSERT INTO Customer
VALUES(3,'efghrt@gmail.com',3434,'amir','rahimi','male',6605000,09987654321,'gheydariye');

INSERT INTO Customer
VALUES(4,'rttryy@gmail.com',5645,'arya','homayon','male',5065000,09098765432,'velenjak');

INSERT INTO Customer
VALUES(5,'rtyrty@gmail.com',4523,'saman','dizani','male',56032000,09097867654,'darake');

INSERT INTO Customer
VALUES(6,'dghsaar@gmail.com',2345,'sina','safabakhsh','male',2350576000,09095687452,'pasdaran');

INSERT INTO Customer
VALUES(7,'vbmnv@gmail.com',1231,'mahdis','zarandi','female',41741000,09112345678,'Narmak');

INSERT INTO Customer
VALUES(8,'ee@gmail.com',2342,'setare','norhoseyni','female',5285000,09114526398,'Shemiran');

INSERT INTO Customer
VALUES(9,'sdfewsdffb@gmail.com',3534,'mahdis','zarandi','female',963963000,09112548796,'Shemiran');

INSERT INTO Customer
VALUES(10,'sasdfedfb@gmail.com',3455,'setare','homayonpor','female',12313000,09132569847,'Narmak');

INSERT INTO Customer
VALUES(11,'sdfb@gmail.com',4564,'nastaran','safabakhsh','female',4564000,09112365985,'Narmak');

INSERT INTO Customer
VALUES(12,'dsfbdsfb@gmail.com',5678,'nastaran','homayonpor','female',456445000,09198642345,'vanak');

INSERT INTO Customer
```



```
VALUES(13,'sdfb@gmail.com',6786,'sara','homayonpor','female',789978000,0911122
6685,'vanak');

INSERT INTO Customer
VALUES(14,'hk,@gmail.com',7899,'setare','safabakhsh','female',789789000,091123
36695,'pasdaran');

INSERT INTO Customer
VALUES(15,'fdghn@gmail.com',7986,'mahdis','norhoseyni','female',456456000,0918
8569932,'ponak');

INSERT INTO Customer
VALUES(16,'gujhh@gmail.com',9782,'mina','zarandi','female',123132000,091214596
38,'velenjak');

INSERT INTO Customer
VALUES(17,'k,jhk,@gmail.com',3455,'setare','norhoseyni','female',63963000,0911
4786597,'pasdaran');
```

```
INSERT INTO Manager

VALUES(100,'sdfbsda@gmail.com',5454,'iman','shahriyari','male',09121152649,'Niavar
an');

INSERT INTO Manager

VALUES(101,'qwdq@gmail.com',1212,'Anahita','bazargani','male',09121345272,'velenja
k');

INSERT INTO Manager

VALUES(102,'askj@gmail.com',1233,'Azar','nazerfard','male',09110198171,'Niavaran')
;

INSERT INTO Manager
```




```
VALUES(103,'avkjl@gmail.com',0191,'mehran','marsosi','male',09119181716,'pasdaran')
);

INSERT INTO Manager

VALUES(104,'aioufv@gmail.com',1377,'danial','hatam','male',09123242526,'ponak');

INSERT INTO Manager
VALUES(105,'posdv@gmail.com',0393,'reza','madani','male',09192928272,'vanak');

INSERT INTO Manager

VALUES(106,'ewnwe@gmail.com',1377,'sourush','noshad','male',09103938363,'darake');

INSERT INTO Manager

VALUES(107,'weInfln@gmail.com',1377,'mahdi','ahmadpanah','male',09104029303,'Narmak');

INSERT INTO Manager

VALUES(108,'wefinwe@gmail.com',4680,'mahdis','nikpor','male',09120183745,'velenjak');

INSERT INTO Manager

VALUES(109,'poiwjef@gmail.com',0191,'Laleh','khodaverdian','male',09109832145,'Lavizan');

INSERT INTO Manager

VALUES(110,'asdvf@gmail.com',8392,'Neda','bagheri','male',09108362748,'Shemiran');

INSERT INTO Manager

VALUES(111,'brf@gmail.com',1335,'satar','ahmadi','male',09143728394,'SaadatAbad');

INSERT INTO Manager

VALUES(112,'mkuieyh@gmail.com',1347,'Yasamin','safari','female',09124262893,'Gisha');

INSERT INTO Manager
```



```
VALUES(113,'hetyj@gmail.com',1377,'Sepideh','varaste','female',09234123444,'Gomrok');

INSERT INTO Manager
VALUES(114,'yoltuk@gmail.com',1243,'Nazanin','hadifar','female',09123423466,'SaadatAbad');

INSERT INTO Manager
VALUES(115,'tikukkt@gmail.com',1373,'Sara','eslami','female',09134676767,'Jamaran');

INSERT INTO Manager
VALUES(116,'jrtjejtyjgh@gmail.com',0191,'Roxana','sabaee','female',09165756777,'Farahzad');

INSERT INTO Manager
VALUES(117,'dfh@gmail.com',8392,'Soraya','faraji','female',09456565651,'Evin');

INSERT INTO Manager
VALUES(118,'dfh56u56h@gmail.com',1373,'parvane','mirkalili','female',09156756756,'SaadatAbad');

INSERT INTO Manager
VALUES(119,'46yu57iufh@gmail.com',1373,'Sepideh','bagheri','female',09156756777,'Ekhtiarieh');

INSERT INTO Manager
VALUES(120,'4t3tgg@gmail.com',8392,'nastaran','mosavi','female',09153635645,'Doulat');

INSERT INTO Manager
VALUES(121,'4yhyjdfj@gmail.com',0191,'firoze','farbeh','female',09112342344,'SaadatAbad');

INSERT INTO Manager
```



```
VALUES(122,'rjh57uyhjnd@gmail.com',8392,'farnaz','oodi','female',09136546456,'dara  
ke');
```

```
INSERT INTO vendor  
VALUES(1000,'sepah','tehran',8773,'SaadatAbad',22174149  
);  
  
INSERT INTO vendor  
VALUES(1001,'SaadatAbad','tehran',1030,'satarkhan',22426292  
);  
  
INSERT INTO vendor  
VALUES(1002,'refah','tehran',5379,'pasdaran',44504035  
);  
  
INSERT INTO vendor  
VALUES(1003,'hamshahri','tehran',4968,'Shemiran',22208030  
);  
  
INSERT INTO vendor  
VALUES(1004,'ok','tehran',3162,'velenjak',33565241  
);  
  
INSERT INTO vendor  
VALUES(1005,'hami','tehran',6886,'Evin',88564412  
);  
  
INSERT INTO vendor  
VALUES(1006,'sobhan','tabriz',9758,'Ekhtiarieh',778885692  
);  
  
INSERT INTO vendor  
VALUES(1007,'arya','shiraz',5715,'darake',44506060  
);  
  
INSERT INTO vendor  
VALUES(1008,'varaste','rasht',312,'Doulat',51242563
```



```
);  
  
INSERT INTO vendor  
VALUES(1009,'moghim', 'tehran', 3666, 'tehransar', 23563638  
);
```

```
INSERT INTO orders  
VALUES(500,1000,0,'Registered','Creditpayment','2018-11-10','velenjak');  
  
INSERT INTO orders  
VALUES(501,1000,0,'Registered','Creditpayment','2018-1-8','Niavaran');  
  
INSERT INTO orders  
VALUES(502,1000,0,'Registered','Creditpayment','2018-1-6','pasdaran');  
  
INSERT INTO orders  
VALUES(503,1000,0,'Registered','Creditpayment','2018-12-18','ponak');  
  
INSERT INTO orders  
VALUES(504,1000,0,'Registered','Creditpayment','2018-6-12','velenjak');  
  
INSERT INTO orders  
VALUES(505,1000,0,'Registered','Creditpayment','2018-11-10','Jamaran');  
  
INSERT INTO orders  
VALUES(506,1000,0,'Registered','Bankpayment','2018-1-8','Doulat');  
  
INSERT INTO orders  
VALUES(507,1000,0,'Registered','Bankpayment','2018-1-6','Ekhtiarieh');  
  
INSERT INTO orders  
VALUES(508,1000,0,'Registered','Bankpayment','2018-12-18','Gisha');  
  
INSERT INTO orders  
VALUES(509,1000,0,'Registered','Bankpayment','2018-6-12','Farahzad');  
  
INSERT INTO orders  
VALUES(510,1001,1,'Registered','Creditpayment','2018-1-10','velenjak');  
  
INSERT INTO orders  
VALUES(511,1001,1,'Registered','Creditpayment','2018-9-8','Niavaran');
```



```
INSERT INTO orders
VALUES(512,1001,1,'Registered','Creditpayment','2018-6-6','pasdaran');

INSERT INTO orders
VALUES(513,1001,1,'Registered','Creditpayment','2018-8-18','ponak');

INSERT INTO orders
VALUES(514,1001,1,'Registered','Creditpayment','2018-6-12','velenjak');

INSERT INTO orders
VALUES(515,1002,1,'Registered','Creditpayment','2018-11-10','Jamaran');

INSERT INTO orders
VALUES(516,1004,1,'Registered','Bankpayment','2018-1-8','Doulat');

INSERT INTO orders
VALUES(517,1003,1,'Registered','Bankpayment','2018-1-6','Ekhtiarieh');

INSERT INTO orders
VALUES(518,1003,1,'Registered','Bankpayment','2018-12-18','Gisha');

INSERT INTO orders
VALUES(519,1005,1,'Registered','Bankpayment','2018-6-12','Farahzad');

INSERT INTO orders
VALUES(520,1006,2,'Registered','Creditpayment','2018-1-10','velenjak');

INSERT INTO orders
VALUES(521,1006,2,'Registered','Creditpayment','2018-9-8','Niavaran');

INSERT INTO orders
VALUES(522,1007,2,'Registered','Creditpayment','2018-6-6','pasdaran');

INSERT INTO orders
VALUES(523,1008,3,'Registered','Creditpayment','2018-8-18','ponak');

INSERT INTO orders
VALUES(524,1008,3,'Registered','Creditpayment','2018-6-12','velenjak');

INSERT INTO orders
VALUES(525,1008,3,'Registered','Creditpayment','2018-11-10','Jamaran');

INSERT INTO orders
```



```
VALUES(526,1008,4,'Registered','Bankpayment','2018-1-8','Doulat');

INSERT INTO orders
VALUES(527,1007,5,'Registered','Bankpayment','2018-1-6','Ekhtiarieh');

INSERT INTO orders
VALUES(528,1008,4,'Registered','Bankpayment','2018-12-18','Gisha');

INSERT INTO orders
VALUES(529,1006,5,'Registered','Bankpayment','2018-6-12','Farahzad');

INSERT INTO orders
VALUES(530,1007,5,'Registered','Creditpayment','2018-1-10','velenjak');

INSERT INTO orders
VALUES(531,1009,6,'Registered','Creditpayment','2018-9-8','Niavaran');

INSERT INTO orders
VALUES(532,1001,7,'Registered','Creditpayment','2018-6-6','pasdaran');

INSERT INTO orders
VALUES(533,1002,8,'Registered','Creditpayment','2018-8-18','ponak');

INSERT INTO orders
VALUES(534,1003,8,'Registered','Creditpayment','2018-6-12','velenjak');

INSERT INTO orders
VALUES(535,1004,9,'Registered','Creditpayment','2018-11-10','Jamaran');

INSERT INTO orders
VALUES(536,1005,10,'Registered','Bankpayment','2018-1-8','Doulat');

INSERT INTO orders
VALUES(537,1006,10,'Registered','Bankpayment','2018-1-6','Ekhtiarieh');

INSERT INTO orders
VALUES(538,1007,11,'Registered','Bankpayment','2018-12-18','Gisha');

INSERT INTO orders
VALUES(539,1008,12,'Registered','Bankpayment','2018-6-12','Farahzad');

INSERT INTO orders
VALUES(540,1008,14,'Registered','Bankpayment','2018-1-6','Ekhtiarieh');
```



```
INSERT INTO orders
VALUES(541,1006,15,'Registered','Bankpayment','2018-12-18','Gisha');

INSERT INTO orders
VALUES(542,1005,16,'Registered','Bankpayment','2018-3-12','Farahzad');

INSERT INTO orders
VALUES(543,1002,17,'Registered','Bankpayment','2018-3-6','Ekhtiarieh');

INSERT INTO orders
VALUES(544,1003,17,'Registered','Bankpayment','2018-2-18','Gisha');

INSERT INTO orders
VALUES(545,1003,16,'Registered','Bankpayment','2018-3-12','Farahzad');
```

```
INSERT INTO product
VALUES(300,'Shampoo',12000);

INSERT INTO product
VALUES(301,'Butter',65000);

INSERT INTO product
VALUES(302,'Sugar',958000);

INSERT INTO product
VALUES(303,'Oil',968000);

INSERT INTO product
VALUES(304,'Fish',553000);

INSERT INTO product
VALUES(305,'Meat',15400);

INSERT INTO product
VALUES(306,'Pencil',125000);

INSERT INTO product
```



```
VALUES(307, 'note book', 623400);

INSERT INTO product
VALUES(308, 'PEN', 154600);

INSERT INTO product
VALUES(309, 'BOOK', 152000);

INSERT INTO product
VALUES(310, 'Chicken', 151202);

INSERT INTO product
VALUES(311, 'Macaroni', 832000);

INSERT INTO product
VALUES(312, 'drinks', 798700);

INSERT INTO product
VALUES(313, 'Socks', 646840);

INSERT INTO product
VALUES(314, 'Glue', 40000);

INSERT INTO product
VALUES(315, 'WateR', 450000);
```

```
INSERT INTO VendorProduct
VALUES(1000, 300, 11);

INSERT INTO VendorProduct
VALUES(1001, 301, 100);

INSERT INTO VendorProduct
VALUES(1000, 301, 200);

INSERT INTO VendorProduct
VALUES(1000, 302, 200);
```




```
INSERT INTO VendorProduct
VALUES(1001,302,111);

INSERT INTO VendorProduct
VALUES(1001,303,333);

INSERT INTO VendorProduct
VALUES(1001,304,36);

INSERT INTO VendorProduct
VALUES(1001,305,7);

INSERT INTO VendorProduct
VALUES(1001,309,77);

INSERT INTO VendorProduct
VALUES(1001,310,66);

INSERT INTO VendorProduct
VALUES(1001,311,33);

INSERT INTO VendorProduct
VALUES(1001,312,99);

INSERT INTO VendorProduct
VALUES(1000,303,65);

INSERT INTO VendorProduct
VALUES(1001,313,36);

INSERT INTO VendorProduct
VALUES(1001,308,85);

INSERT INTO VendorProduct
VALUES(1000,304,25);

INSERT INTO VendorProduct
VALUES(1002,301,19);

INSERT INTO VendorProduct
VALUES(1003,302,100);

INSERT INTO VendorProduct
VALUES(1004,305,200);
```



```
INSERT INTO VendorProduct  
VALUES(1005,304,300);
```

```
INSERT INTO VendorProduct  
VALUES(1006,300,85);
```

```
INSERT INTO VendorProduct  
VALUES(1000,314,787);
```

```
INSERT INTO VendorProduct  
VALUES(1000,315,747);
```

```
INSERT INTO VendorProduct  
VALUES(1000,308,14);
```

```
INSERT INTO VendorProduct  
VALUES(1000,307,15);
```

```
INSERT INTO VendorProduct  
VALUES(1006,301,16);
```

```
INSERT INTO VendorProduct  
VALUES(1006,307,18);
```

```
INSERT INTO VendorProduct  
VALUES(1005,307,22);
```

```
INSERT INTO VendorProduct  
VALUES(1006,306,35);
```

```
INSERT INTO VendorProduct  
VALUES(1008,306,747);
```

```
INSERT INTO VendorProduct  
VALUES(1007,306,14);
```

```
INSERT INTO VendorProduct  
VALUES(1007,303,15);
```

```
INSERT INTO VendorProduct  
VALUES(1001,307,16);
```

```
INSERT INTO VendorProduct
```



```
VALUES(1001,306,18);  
  
INSERT INTO VendorProduct  
VALUES(1001,300,22);  
  
INSERT INTO VendorProduct  
VALUES(1007,300,35);
```

```
INSERT INTO OrderProduct  
VALUES (500,300,2);  
  
INSERT INTO OrderProduct  
VALUES (500,300,2);
```

باقی OrderProduct ها پاک شدند.



قسمت سوم

کوئریهای زیر را انجام دهید:
۱- فروشگاه هایی که شهر آنها تهران است.

```
SELECT *  
FROM VENDOR  
WHERE CITY='TEHRAN';
```

+ Options

ID	Title	City	ManagerID	Address	Phone
1000	sepah	tehran	8773	SaadatAbad	22174149
1001	SaadatAbad	tehran	1030	satarkhan	22426292
1002	refah	tehran	5379	pasdaran	44504035
1003	hamshahri	tehran	4968	Shemiran	22208030
1004	ok	tehran	3162	velenjak	33565241
1005	hami	tehran	6886	Evin	88564412
1009	moghimi	tehran	3666	tehransar	23563638

۲- مشتریانی که شیوه پرداخت آنها اعتباری بوده است.

```
SELECT DISTINCT customer.`ID`, `Email`, `Password`, `FirstName`, `LastName`,  
`Sex`, `Credit`, `Cellphone`, `Address`  
FROM `customer`, `orders`  
WHERE PaymentType='Creditpayment';
```

/*2*/

```
SELECT DISTINCT `FirstName`, `LastName`  
FROM `customer`, `orders`  
WHERE PaymentType='Creditpayment';
```



+ Options										
		ID	Email	Password	FirstName	LastName	Sex	Credit	Cellphone	Address
<input type="checkbox"/>	Edit	0	sqfghwda@sas.com	2000	sina	hamidi	male	178000000	2147483647	velenjak
<input type="checkbox"/>	Edit	1	qhwe@gmail.com	4231	amir	varaste	male	12023000	2147483647	tehransar
<input type="checkbox"/>	Edit	2	ewfghe@gmail.com	5443	arya	sajjadi	male	102346000	2147483647	satarkhan
<input type="checkbox"/>	Edit	3	efghrt@gmail.com	3434	amir	rahimi	male	6605000	2147483647	gheydariye
<input type="checkbox"/>	Edit	4	rttryy@gmail.com	5645	arya	homayon	male	5065000	2147483647	velenjak
<input type="checkbox"/>	Edit	5	rttyrty@gmail.com	4523	saman	dizani	male	56032000	2147483647	darake
<input type="checkbox"/>	Edit	6	dghsaar@gmail.com	2345	sina	safabakhsh	male	2350576000	2147483647	pasdaran
<input type="checkbox"/>	Edit	7	vbmrv@gmail.com	1231	mahdis	zarandi	female	41741000	2147483647	Narmak
<input type="checkbox"/>	Edit	8	ee@gmail.com	2342	setare	norhoseyni	female	5285000	2147483647	Shemiran
<input type="checkbox"/>	Edit	9	sdfewsdffb@gmail.com	3534	mahdis	zarandi	female	963963000	2147483647	Shemiran
<input type="checkbox"/>	Edit	10	sasdfedfb@gmail.com	3455	setare	homayonpor	female	12313000	2147483647	Narmak
<input type="checkbox"/>	Edit	11	sdfb@gmail.com	4564	nastaran	safabakhsh	female	4564000	2147483647	Narmak
<input type="checkbox"/>	Edit	12	dsfbdbsfb@gmail.com	5678	nastaran	homayonpor	female	456445000	2147483647	vanak
<input type="checkbox"/>	Edit	13	sdfb@gmail.com	6786	sara	homayonpor	female	789978000	2147483647	vanak
<input type="checkbox"/>	Edit	14	hk.@gmail.com	7899	setare	safabakhsh	female	789789000	2147483647	pasdaran
<input type="checkbox"/>	Edit	15	fdghn@gmail.com	7986	mahdis	norhoseyni	female	456456000	2147483647	ponak
<input type="checkbox"/>	Edit	16	gujkh@gmail.com	9782	mina	zarandi	female	123132000	2147483647	velenjak
<input type="checkbox"/>	Edit	17	k.jhk.@gmail.com	3455	setare	norhoseyni	female	63963000	2147483647	pasdaran

+ Options

FirstName	LastName
sina	hamidi
amir	varaste
arya	sajjadi
amir	rahimi
arya	homayon
saman	dizani
sina	safabakhsh
mahdis	zarandi
setare	norhoseyni
setare	homayonpor
nastaran	safabakhsh
nastaran	homayonpor
sara	homayonpor
setare	safabakhsh
mahdis	norhoseyni
mina	zarandi



۳- فروشگاهی که بیش از ۱۰ محصول دارند.

```
SELECT DISTINCT vendor.`ID`, `Title`, `City`, `ManagerID`, `Address`, `Phone`
FROM `vendor`, `vendorproduct`
WHERE amount>10;
```

/*2*/

```
SELECT DISTINCT `Title`
FROM `vendor`, `vendorproduct`
WHERE amount>10;
```

+ Options

		ID	Title	City	ManagerID	Address	Phone
<input type="checkbox"/>	Edit Copy Delete	1000	sepah	tehran	8773	SaadatAbad	22174149
<input type="checkbox"/>	Edit Copy Delete	1001	SaadatAbad	tehran	1030	satarkhan	22426292
<input type="checkbox"/>	Edit Copy Delete	1002	refah	tehran	5379	pasdaran	44504035
<input type="checkbox"/>	Edit Copy Delete	1003	hamshahri	tehran	4968	Shemiran	22208030
<input type="checkbox"/>	Edit Copy Delete	1004	ok	tehran	3162	velenjak	33565241
<input type="checkbox"/>	Edit Copy Delete	1005	hami	tehran	6886	Evin	88564412
<input type="checkbox"/>	Edit Copy Delete	1006	sobhan	tabriz	9758	Ekhtiarieh	778885692
<input type="checkbox"/>	Edit Copy Delete	1007	arya	shiraz	5715	darake	44506060
<input type="checkbox"/>	Edit Copy Delete	1008	varaste	rasht	312	Doulat	51242563
<input type="checkbox"/>	Edit Copy Delete	1009	moghimi	tehran	3666	tehransar	23563638

+ Options

Title
sepah
SaadatAbad
refah
hamshahri
ok
hami
sobhan
arya
varaste
moghimi



آریا وارسته تژاد

۴- فروشگاهی که بیشتر از ۱۰ محصول فروخته است به همراه مشخصات محصولات.

```
SELECT DISTINCT vendor.`ID`, vendor.`Title`, `City`, `ManagerID`, `Address`,
`Phone`, product.`ID`, product.`Title`, product.`price`
FROM `vendor`, `vendorproduct`, orderproduct, product
WHERE orderproduct.`amount` > 10;
```

ID	Title	City	ManagerID	Address	Phone	ID	Title	price	amount
1000	sepah	tehran				300	Shampoo	12000	12
1001	SaadatAbad	tehran				301	Butter	65000	12
1002	refah	tehran				302	Sugar	958000	12
1003	hamshahri	tehran				303	Oil	968000	12
1004	ok	tehran	3162	velenjak	33565241	304	Fish	553000	12
1005	hami	tehran	6886	Evin	88564412	305	Meat	15400	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	306	Pencil	125000	12
1007	arya	shiraz	5715	darake	44506060	307	note book	623400	12
1008	varaste	rasht	312	Doulat	51242563	308	PEN	154600	12
1009	moghimi	tehran	3666	tehransar	23563638	309	BOOK	152000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	310	BOOK	152000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	311	BOOK	152000	12
1002	refah	tehran	5379	pasdaran	44504035	312	BOOK	152000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	313	BOOK	152000	12
1004	ok	tehran	3162	velenjak	33565241	314	BOOK	152000	12
1005	hami	tehran	6886	Evin	88564412	315	BOOK	152000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	316	BOOK	152000	12
1007	arya	shiraz	5715	darake	44506060	317	BOOK	152000	12
1008	varaste	rasht	312	Doulat	51242563	318	BOOK	152000	12
1009	moghimi	tehran	3666	tehransar	23563638	319	BOOK	152000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	320	BOOK	152000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	321	BOOK	152000	12
1002	refah	tehran	5379	pasdaran	44504035	322	BOOK	152000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	323	BOOK	152000	12
1004	ok	tehran	3162	velenjak	33565241	324	BOOK	152000	12
1005	hami	tehran	6886	Evin	88564412	325	BOOK	152000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	326	BOOK	152000	12
1007	arya	shiraz	5715	darake	44506060	327	BOOK	152000	12
1008	varaste	rasht	312	Doulat	51242563	328	BOOK	152000	12
1009	moghimi	tehran	3666	tehransar	23563638	329	BOOK	152000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	330	BOOK	152000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	331	BOOK	152000	12
1002	refah	tehran	5379	pasdaran	44504035	332	BOOK	152000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	333	BOOK	152000	12
1004	ok	tehran	3162	velenjak	33565241	334	BOOK	152000	12
1005	hami	tehran	6886	Evin	88564412	335	BOOK	152000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	336	BOOK	152000	12
1007	arya	shiraz	5715	darake	44506060	337	BOOK	152000	12
1008	varaste	rasht	312	Doulat	51242563	338	BOOK	152000	12
1009	moghimi	tehran	3666	tehransar	23563638	339	BOOK	152000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	340	BOOK	152000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	341	BOOK	152000	12
1002	refah	tehran	5379	pasdaran	44504035	342	BOOK	152000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	343	BOOK	152000	12
1004	ok	tehran	3162	velenjak	33565241	344	BOOK	152000	12
1005	hami	tehran	6886	Evin	88564412	345	BOOK	152000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	346	BOOK	152000	12
1007	arya	shiraz	5715	darake	44506060	347	BOOK	152000	12
1008	varaste	rasht	312	Doulat	51242563	348	BOOK	152000	12
1009	moghimi	tehran	3666	tehransar	23563638	349	BOOK	152000	12



ID	Title	City	ManagerID	Address	Phone	ID	Title	price	amount
1000	sepah	tehran	8773	SaadatAbad	22174149	310	Chicken	151202	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	310	Chicken	151202	12
1002	refah	tehran	5379	pasdaran	44504035	310	Chicken	151202	12
1003	hamshahri	tehran	4968	Shemiran	22208030	310	Chicken	151202	12
1004	ok	tehran	3162	velenjak	33565241	310	Chicken	151202	12
1005	hami	tehran	6886	Evin	88564412	310	Chicken	151202	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	310	Chicken	151202	12
1007	arya	shiraz	5715	darake	44506060	310	Chicken	151202	12
1008	varaste	rasht	312	Doulat	51242563	310	Chicken	151202	12
1009	moghimi	tehran	3666	tehransar	23563638	310	Chicken	151202	12
1000	sepah	tehran	8773	SaadatAbad	22174149	311	Macaroni	832000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	311	Macaroni	832000	12
1002	refah	tehran	5379	pasdaran	44504035	311	Macaroni	832000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	311	Macaroni	832000	12
1004	ok	tehran	3162	velenjak	33565241	311	Macaroni	832000	12
1005	hami	tehran	6886	Evin	88564412	311	Macaroni	832000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	311	Macaroni	832000	12
1007	arya	shiraz	5715	darake	44506060	311	Macaroni	832000	12
1008	varaste	rasht	312	Doulat	51242563	311	Macaroni	832000	12
1009	moghimi	tehran	3666	tehransar	23563638	311	Macaroni	832000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	312	drinks	798700	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	312	drinks	798700	12
1002	refah	tehran	5379	pasdaran	44504035	312	drinks	798700	12
1003	hamshahri	tehran	4968	Shemiran	22208030	312	drinks	798700	12
1004	ok	tehran	3162	velenjak	33565241	312	drinks	798700	12
1005	hami	tehran	6886	Evin	88564412	312	drinks	798700	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	312	drinks	798700	12
1007	arya	shiraz	5715	darake	44506060	312	drinks	798700	12
1008	varaste	rasht	312	Doulat	51242563	312	drinks	798700	12
1009	moghimi	tehran	3666	tehransar	23563638	312	drinks	798700	12
1000	sepah	tehran	8773	SaadatAbad	22174149	313	Socks	646840	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	313	Socks	646840	12
1002	refah	tehran	5379	pasdaran	44504035	313	Socks	646840	12
1003	hamshahri	tehran	4968	Shemiran	22208030	313	Socks	646840	12
1004	ok	tehran	3162	velenjak	33565241	313	Socks	646840	12
1005	hami	tehran	6886	Evin	88564412	313	Socks	646840	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	313	Socks	646840	12
1007	arya	shiraz	5715	darake	44506060	313	Socks	646840	12
1008	varaste	rasht	312	Doulat	51242563	313	Socks	646840	12
1009	moghimi	tehran	3666	tehransar	23563638	313	Socks	646840	12
1000	sepah	tehran	8773	SaadatAbad	22174149	314	Glue	40000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	314	Glue	40000	12
1002	refah	tehran	5379	pasdaran	44504035	314	Glue	40000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	314	Glue	40000	12
1004	ok	tehran	3162	velenjak	33565241	314	Glue	40000	12
1005	hami	tehran	6886	Evin	88564412	314	Glue	40000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	314	Glue	40000	12
1007	arya	shiraz	5715	darake	44506060	314	Glue	40000	12
1008	varaste	rasht	312	Doulat	51242563	314	Glue	40000	12
1009	moghimi	tehran	3666	tehransar	23563638	314	Glue	40000	12
1000	sepah	tehran	8773	SaadatAbad	22174149	315	Water	450000	12
1001	SaadatAbad	tehran	1030	satarkhan	22426292	315	Water	450000	12
1002	refah	tehran	5379	pasdaran	44504035	315	Water	450000	12
1003	hamshahri	tehran	4968	Shemiran	22208030	315	Water	450000	12
1004	ok	tehran	3162	velenjak	33565241	315	Water	450000	12
1005	hami	tehran	6886	Evin	88564412	315	Water	450000	12
1006	sobhan	tabriz	9758	Ekhtiarieh	778885692	315	Water	450000	12
1007	arya	shiraz	5715	darake	44506060	315	Water	450000	12
1008	varaste	rasht	312	Doulat	51242563	315	Water	450000	12
1009	moghimi	tehran	3666	tehransar	23563638	315	Water	450000	12



Show all

Number of rows:

500

Filter rows:

Search this table

Query results operations



Print



Copy to clipboard



Export



Display chart



Create view



۵- مشتریانی که حداقل یک کالای مشابه سفارش داده اند.

```
create view customer_product as
select *
from customer natrula join Order natrual join orderProduct
select customer.`FirstName`,customer.`LastName`
from customer
where id in (select t.id
from customer_product as t,customer product as s
where t.productId = s.productId and t.customerid != s.customerid)
```

۶- مشتریانی که آدرس سفارش آن ها، همان آدرس ثبت شده در جدول Customer است.

```
SELECT DISTINCT customer.FirstName, customer.LastName
FROM customer, orders
WHERE customer.ID=orders.CustomerID AND orders.DeliveryAddress=customer.Address;
```

+ Options

FirstName	LastName
sina	hamidi

۷- کالاهایی که بیشتر از ۱۰ مشتری آن را سفارش داده اند.

۸- تمامی مشتریانی که در یک ماه اخیر بیشتر از یک فروشگاه خرید کرده اند.

۹- تمامی فروشگاههایی که میانگین سبد خرید مشتریان آنها بیشتر از ۱۰۰ هزار تومان است.

۱۰- سومین محصول پرفروش فروشگاه سعادت آباد.

۱۱- مشتریانی که در یک ماه اخیر سفارش نداده اند، در صورتی که قبل از آن سفارش ثبت کرده بودند.



۱۲- دو کالایی که مشتریان آنها را بیشتر از هر دو کالایی در فروشگاه پاسداران با هم خریده اند

- توجه شود که اگر برای راحتی ترجیح دادید یکی از فرضهای کوئریها را تغییر دهید، حتما در گزارش نهایی به طور دقیق ذکر کنید.

چون order از کلمات کلیدی بود بجای آن از orders استفاده کردم.

راهنمایی

- در فایل CTPA1 کوئری های مربوط به ساخت جدول ها را قرار دادم.
- در فایل PA1 همه کوئری های مربوط به پرکردن جدول وجود دارد به همراه چند پرس وجو جانبی.
- در پوشه ها هم از ۱ الی ۱۲ کوئری ها و عکس هایی از نتیجه های آنها قرار داده شده است.