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IPA_Milestone 3

```
/*CREATE DATABASE */

CREATE DATABASE omg;

use omg;
```

/* Create tables without INDEX , PK , FK

a. Define which entities will be your PK and Fks and make them “Unique” during to DDL statement.

b. If you have any “Constrains” go ahead create in this stage.*/

/*customer table */

```
CREATE TABLE Customer(

Customer_ID INT NOT NULL,

Customer_Name VARCHAR(25),

Customer_PhoneNo VARCHAR(12),

Customer_address VARCHAR(25),

Customer_Zipcode INT,

);

alter table Customer

ADD constraint PK_Customer_ID PRIMARY KEY(Customer_ID);

alter table Customer

ADD constraint FK_Zipcode FOREIGN KEY (Customer_Zipcode) REFERENCES

States(zipcode);
```

/*states*/

```
CREATE Table  States(

id VARCHAR(2)  ,

city VARCHAR(20),

state VARCHAR(25),

zipcode INT UNIQUE

);


alter table States
```

```
ADD constraint PK_ID PRIMARY KEY(id);


/*Services */

Create Table Services (

service_id VARCHAR(20) NOT NULL,

service_name varchar(21),

service varchar(1),

Customer_ID  int,

price DOUBLE

);

alter Table Services

ADD CONSTRAINT PK_service PRIMARY KEY (service_id);

alter Table Services

add constraint FK_service FOREIGN KEY (Customer_ID) references Customer(Customer_ID);


/*Insurance */

create table insurance (

policy_number varchar(10) NOT NULL,

coverage varchar(10),

term_price double,

type varchar(1),

date_of_issue  date,

service_id varchar(20)

);


alter Table insurance

add CONSTRAINT pk_ins primary key (policy_number);

alter table insurance

add constraint fk_ins foreign key(service_id) references Services(service_id);
```

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```
/*Payment*/


create table payment(
payment_id varchar(10) NOT NULL,
payment_type VARCHAR(1),
payment_name varchar(20),
Customer_ID int,
amount double
);
alter table payment
add CONSTRAINT pk_pay primary key (payment_id);
alter table payment
add constraint fk_pay foreign key (Customer_ID) references Customer(Customer_ID);

/*Order*/
create table orders(
order_id VARCHAR(10) NOT NULL,
service_id VARCHAR(20),
policy_number VARCHAR(10),
address VARCHAR(25),
Customer_ID int,
payment_id VARCHAR(10),
date_of_order date
);

alter Table orders
add CONSTRAINT pk_ord primary key (order_id, service_id, policy_number);
alter table orders
add constraint fk_cus foreign key (Customer_ID) references Customer(Customer_ID);
alter table orders
```

```
add constraint fk_ord foreign key (payment_id) references payment(payment_id);
```

/*plants_supply*/

```
create table plants_supply(

plant_id int NOT NULL,

service_id varchar(20) NOT NULL

);

alter table plants_supply

add constraint pk_ps primary key (plant_id , service_id);
```

/*plants*/

```
create table plants(

plant_id int NOT NULL,

plant_name varchar(20),

plant_type varchar(10),

price double,

service_id varchar(20)

);


alter Table plants

add CONSTRAINT pk_plant  primary key (plant_id);

alter table plants

add constraint fk_plant foreign key (service_id) references services(service_id);
```

/*customer_plants */

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```
create table customer_plants (
plant_id int,
Customer_ID  VARCHAR(20) NOT NULL,
plant_name varchar(20)NOT NULL
);
alter Table customer_plants
add CONSTRAINT pk_cplant primary key (plant_id , Customer_ID);

/*vendor_supply */
create table vendor_supply(
vendor_id  varchar(10) NOT NULL,
plant_id int NOT NULL
);
alter Table vendor_supply
add CONSTRAINT pk_vendor primary key (vendor_id, plant_id);

/*vendors*/
create table vendors(
vendor_id VARCHAR(10) NOT NULL,
vendor_name varchar(25),
vendor_type varchar(2),
tax_id_number VARCHAR(30),
address varchar(30),
zipcode int,
phone_number  VARCHAR(10),
plant_id int
);


alter Table vendors
add constraint pk_ven primary key (vendor_id);
alter table vendors
```

```
add constraint fk_ven foreign key (plant_id) references plants(plant_id);


/* service_job */
CREATE Table service_job(
job_id VARCHAR(10) NOT NULL,
service_id varchar(20),
service_type varchar(1),
job_name varchar(20)
);
alter table service_job
add constraint pk_sj PRIMARY KEY (job_id);
ALTER Table service_job
add CONSTRAINT fk_sj  foreign key (service_id) references services(service_id);


/*worker*/
create TABLE worker(
worker_id varchar(10) NOT NULL,
state_id varchar(10),
Age  int,
policy_number varchar(10),
job_id VARCHAR(10) NOT NULL,
training_id int NOT NULL
);


ALTER TABLE worker
add constraint pk_worker primary key (worker_id,job_id, training_id);
alter table worker
add constraint fk_worker foreign key (policy_number) references insurance(policy_number);


/*equipments*/
create table equipments(
serial_number varchar(10) NOT NULL,
date_made date,
last_inspected date,
service_id varchar(20),
job_id varchar(10)
);
ALTER Table equipments
add CONSTRAINT pk_equip primary key (serial_number);
ALTER table equipments
add constraint fk_equip foreign key (service_id) references services(service_id);
ALTER table equipments
add constraint fk_equip_j foreign key (job_id) references service_job(job_id);

/*Equipment_training */

create Table equipment_training(
training_id int NOT NULL,
training_name varchar(20),
serial_number  varchar(10)
);
alter TABLE equipment_training
add CONSTRAINT pk_train primary key (training_id);
alter TABLE equipment_training
add CONSTRAINT fk_train foreign key (serial_number) references equipments(serial_number);

/*Equipment_repair */
create table equipment_repair(
repair_id  varchar(10)NOT NULL,
serial_number varchar(10),
cost double,
address varchar(30),

zipcode int

);


alter Table equipment_repair

add CONSTRAINT pk_er primary key (repair_id);

alter Table equipment_repair

add CONSTRAINT fk_er foreign key (serial_number) references equipments(serial_number);

/********************************************************************************/

/*Test all your tables before the load any data

All Tables are successfully Created.*/

/*Start inserting data in each table make sure referential integrity in place*/



/*States*/

Insert into states values ("01",   "Austin","        Texas",          73301);

Insert into states values ("02",   "Addison",       "Texas",         75501);

Insert into states values ("03",   "Allen",         "Texas",         75502);

Insert into states values ("04",   "Irving",        "Texas",         75014);

Insert into states values ("05",   "Plano",         "Texas",         75023);

Insert into states values ("06",   "Frisco",        "Texas",         75035);

Insert into states values ("07",   "Richardson",    "Texas",         75080);

Insert into states values ("08",   "Dallas",        "Texas",         75224);

Insert into states values ("09",   "Nevada",        "Texas",         75173);

Insert into states values ("10",   "Rice",          "Texas",         75155);

select * from states;
```

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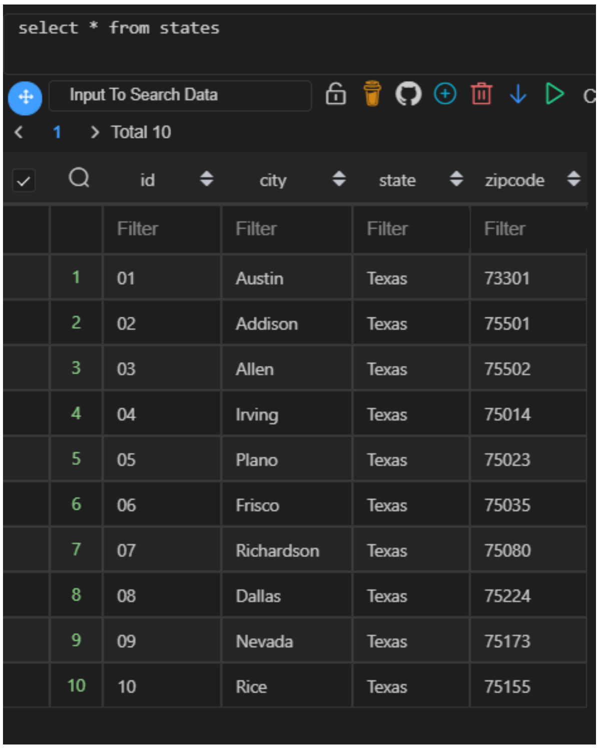


```
select * from states
```

	id	city	state	zipcode
1	01	Austin	Texas	73301
2	02	Addison	Texas	75501
3	03	Allen	Texas	75502
4	04	Irving	Texas	75014
5	05	Plano	Texas	75023
6	06	Frisco	Texas	75035
7	07	Richardson	Texas	75080
8	08	Dallas	Texas	75224
9	09	Nevada	Texas	75173
10	10	Rice	Texas	75155

/*Customer Table*/

Insert into customer values (19001, "Sonali Raj Sonal","9818906621","750 Synerrgy Blvd" ,75080);

insert into customer values (19002,"Aastha Koshta", "4699226927","Niyo Mansion,Addison",75501);

insert into customer values (19003, "Gunjan Chaudhary","4699226923", "Garlon Hokes, allas",75173);

insert into customer values (19004,"Naman Bhatia","4699226924","Courtyard Campbell",75080);

insert into customer values (19005,"Samipya Nanavati","4509988390",   "Elevate Mansion",75501);

insert into customer values (19006,"Sahil Dhoked","4509873940","NiyoRail, Addison",75501);

insert into customer values (19007, "Manoj Bhandari","4699226934","estates of frankford" ,75155);

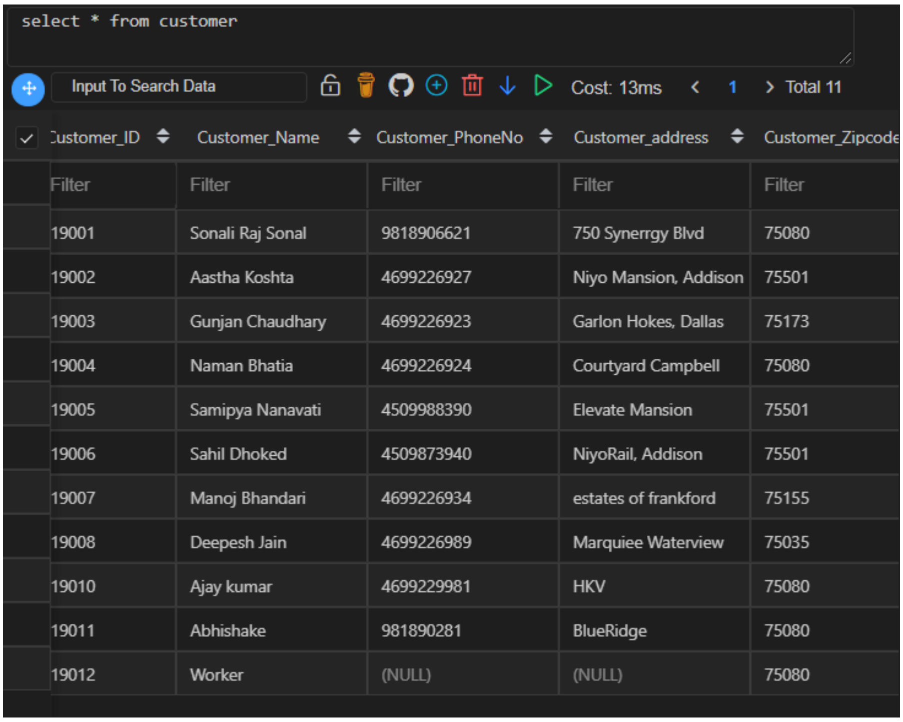
insert into customer values (19008, "Deepesh Jain","4699226989","Marquiee Waterview",75035);

insert into customer values (19010, "Ajay kumar","4699229981", "HKV",75080);

insert into customer values (19011 , "Abhishake", "981890281", "BlueRidge", 75080);

insert into customer values (19012 , "Worker", Null, Null, 75080);

select * from customer;



```
select * from customer
```

Customer_ID	Customer_Name	Customer_PhoneNo	Customer_address	Customer_Zipcode
Filter	Filter	Filter	Filter	Filter
19001	Sonali Raj Sonal	9818906621	750 Synerrgy Blvd	75080
19002	Aastha Koshta	4699226927	Niyo Mansion, Addison	75501
19003	Gunjan Chaudhary	4699226923	Garlon Hokes, Dallas	75173
19004	Naman Bhatia	4699226924	Courtyard Campbell	75080
19005	Samipya Nanavati	4509988390	Elevate Mansion	75501
19006	Sahil Dhoked	4509873940	NiyoRail, Addison	75501
19007	Manoj Bhandari	4699226934	estates of frankford	75155
19008	Deepesh Jain	4699226989	Marquiee Waterview	75035
19010	Ajay kumar	4699229981	HKV	75080
19011	Abhishake	981890281	BlueRidge	75080
19012	Worker	(NULL)	(NULL)	75080

```
/*Services*/

insert into services VALUES("1", "Irrigation",      "C",      19001,  100);

insert into services VALUES("2", "Landsacping",  "C",      19001,  110);

insert into services VALUES("3", "holiday decoration","R",19011,110);

insert into services VALUES("4", "Roof Cleaning", "R",      19011,  108);

insert into services VALUES("5", "Fertilizing",      "C",      19003,  108);

insert into services VALUES("6","Fall Cleaning",  "C",      19004   ,109);

insert into services VALUES("7", "Waste Recycle","R",      19005   ,107);

insert into services VALUES("8", "Yard waste Removal",  "R",19006,130);

insert into services VALUES("9", "Pest Control",  "R",      19006,  130);

insert into services VALUES("10","Tree service",  "C",      19002   ,120 );

insert into services VALUES("11","worker_insurance","W",19011,NULL );

select * from services;
```

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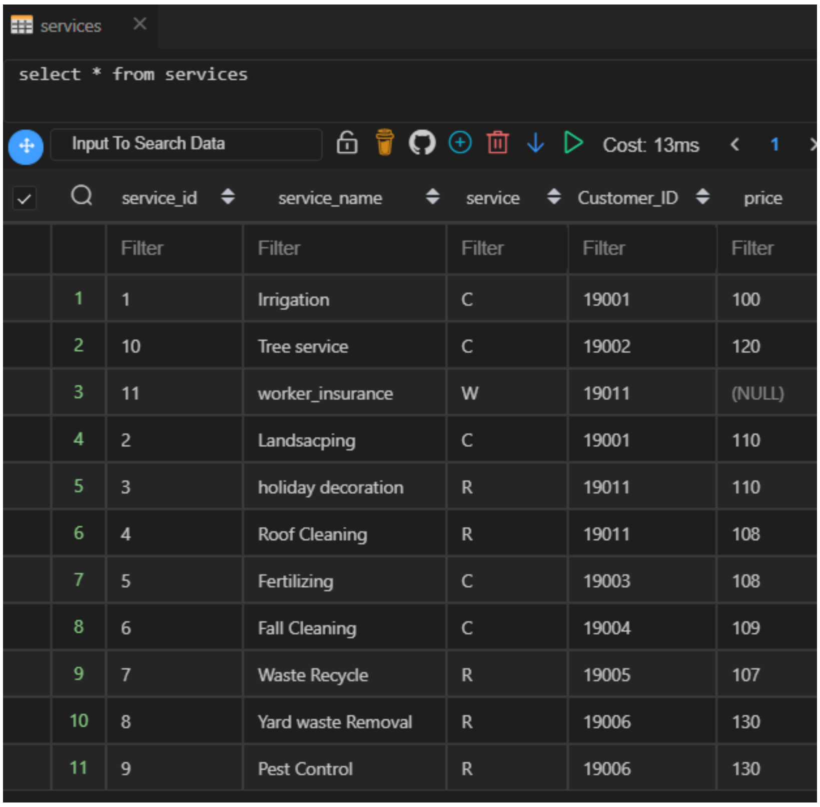

```
select * from services
```

	service_id	service_name	service	Customer_ID	price
	Filter	Filter	Filter	Filter	Filter
1	1	Irrigation	C	19001	100
2	10	Tree service	C	19002	120
3	11	worker_insurance	W	19011	(NULL)
4	2	Landsacping	C	19001	110
5	3	holiday decoration	R	19011	110
6	4	Roof Cleaning	R	19011	108
7	5	Fertilizing	C	19003	108
8	6	Fall Cleaning	C	19004	109
9	7	Waste Recycle	R	19005	107
10	8	Yard waste Removal	R	19006	130
11	9	Pest Control	R	19006	130

/*Insurance*/

```
insert INTO insurance VALUES("A12",   "10000",     20,    "C",    20211104,     "1");
insert INTO insurance VALUES("A13",   "10000",     25,    "C",    20211010,     "2");
insert INTO insurance VALUES("A14",   "10000",     28,    "C" ,   20211004,     "2");
insert INTO insurance VALUES("A15",   "10000",     21,    "C",    20210301,     "3");
insert INTO insurance VALUES("A16",   "10000",     22,    "C",    20210701,     "4");
insert INTO insurance VALUES("A17",   "10000",     24,    "R",    20211101,     "6");
insert INTO insurance VALUES("A18",   "10000",     30,    "R",    20210810,     "3");
insert INTO insurance VALUES("A19",   "10000",     31,    "R"     , 20210808,   "8");
insert INTO insurance VALUES("A20",   "10000",     33,    "R" ,   20210411, "10");
insert INTO insurance VALUES("W12",   "100000",    12,    "W",    20210411, "11");
select * from insurance;
```

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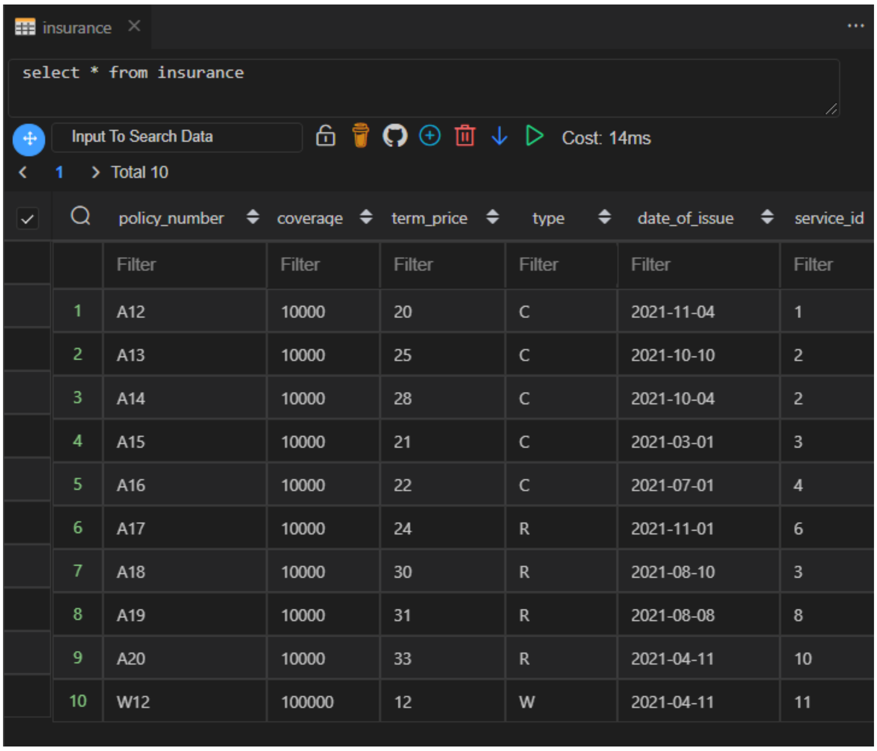
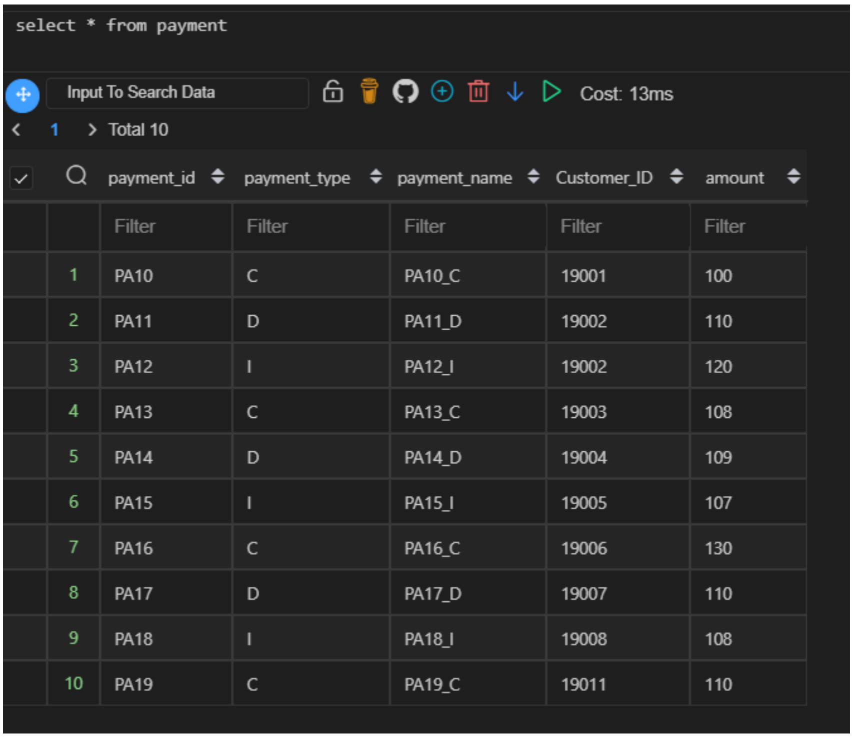


```
select * from insurance
```

	policy_number	coverage	term_price	type	date_of_issue	service_id
1	A12	10000	20	C	2021-11-04	1
2	A13	10000	25	C	2021-10-10	2
3	A14	10000	28	C	2021-10-04	2
4	A15	10000	21	C	2021-03-01	3
5	A16	10000	22	C	2021-07-01	4
6	A17	10000	24	R	2021-11-01	6
7	A18	10000	30	R	2021-08-10	3
8	A19	10000	31	R	2021-08-08	8
9	A20	10000	33	R	2021-04-11	10
10	W12	100000	12	W	2021-04-11	11

```
/*Payment*/

insert INTO payment VALUES("PA10",  "C",    "PA10_C",     19001,  100);

insert into payment VALUES("PA11",  "D"     ,"PA11_D",    19002,  110);

insert into payment VALUES("PA12",  "I",    "PA12_I",     19002,  120);

insert into payment VALUES("PA13",  "C",    "PA13_C",     19003,  108);

insert into payment VALUES("PA14",  "D",    "PA14_D",     19004,  109);

insert into payment VALUES("PA15",  "I",    "PA15_I",     19005,  107);

insert into payment VALUES("PA16",  "C",    "PA16_C",     19006,  130);

insert into payment VALUES("PA17",  "D",    "PA17_D",     19007,  110);

insert into payment VALUES("PA18",  "I",    "PA18_I",     19008,  108);

insert into payment VALUES("PA19",  "C",    "PA19_C",     19011,  110);

select * from payment ;
```



```
select * from payment
```

	payment_id	payment_type	payment_name	Customer_ID	amount
	Filter	Filter	Filter	Filter	Filter
1	PA10	C	PA10_C	19001	100
2	PA11	D	PA11_D	19002	110
3	PA12	I	PA12_I	19002	120
4	PA13	C	PA13_C	19003	108
5	PA14	D	PA14_D	19004	109
6	PA15	I	PA15_I	19005	107
7	PA16	C	PA16_C	19006	130
8	PA17	D	PA17_D	19007	110
9	PA18	I	PA18_I	19008	108
10	PA19	C	PA19_C	19011	110

/*Orders*/

```
insert into  orders values("2001","1", "A12","750 Synerrgy Blvd,",19001, "PA10",20210420);

insert into  orders values("2001", "2", "A12","750 Synerrgy Blvd" ,19001,"PA10",20210418);

insert into  orders values("2001","3", "A12","750 Synerrgy Blvd", 19001  ,"PA10",20210418);

insert into  orders values("2002","2","A13","Niyo Mansion",       19002,  "PA11",20211010);

insert into  orders values("2003","3", "A14"," Niyo Mansion",      19002,  "PA12",20210218);

insert into  orders values("2004","4", "A15", "Garlon Hokes",      19003,  "PA13",20211126);

insert into  orders values("2005","5" ,"A16","Pearl creek",        19003,  "PA14",20210710);

insert into  orders values("2006","6","A17", "Courtyard Campbell",19005, "PA15",20211101);

insert into  orders values("2007","7","A18","Elevate Mansion",   19006,  "PA16",20210810);

insert into  orders values("2008","8", "A19","NiyoRail, Addison", 19007,  "PA17",20210828);

select * from orders;
```

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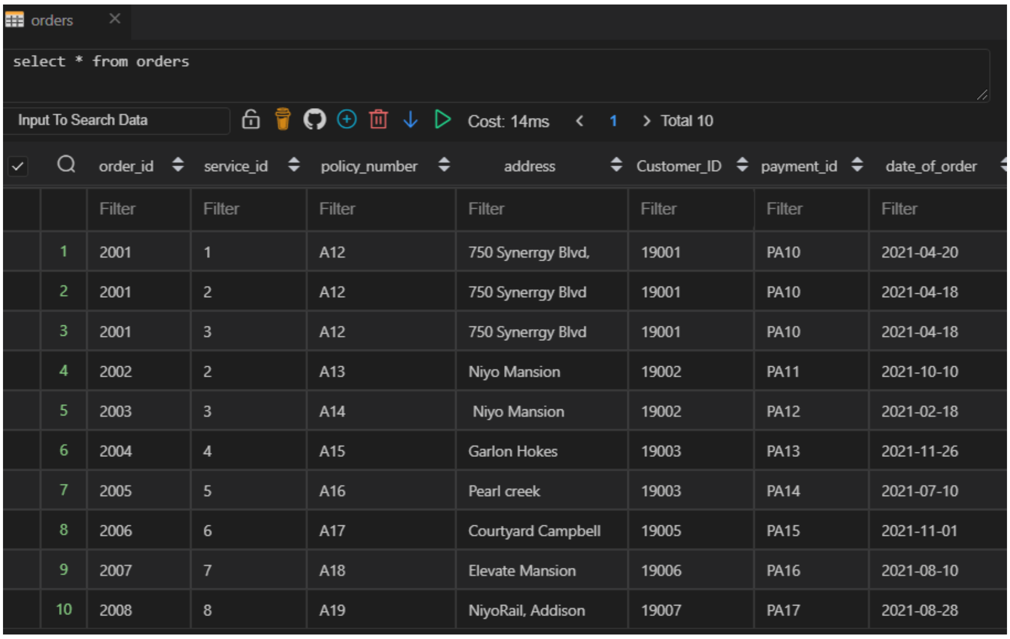

```
select * from orders
```

	order_id	service_id	policy_number	address	Customer_ID	payment_id	date_of_order
1	2001	1	A12	750 Synerrgy Blvd,	19001	PA10	2021-04-20
2	2001	2	A12	750 Synerrgy Blvd	19001	PA10	2021-04-18
3	2001	3	A12	750 Synerrgy Blvd	19001	PA10	2021-04-18
4	2002	2	A13	Niyo Mansion	19002	PA11	2021-10-10
5	2003	3	A14	Niyo Mansion	19002	PA12	2021-02-18
6	2004	4	A15	Garlon Hokes	19003	PA13	2021-11-26
7	2005	5	A16	Pearl creek	19003	PA14	2021-07-10
8	2006	6	A17	Courtyard Campbell	19005	PA15	2021-11-01
9	2007	7	A18	Elevate Mansion	19006	PA16	2021-08-10
10	2008	8	A19	NiyoRail, Addison	19007	PA17	2021-08-28

/*plants_supply*/

```
insert into plants_supply VALUES(1,"1");

insert into plants_supply VALUES(2, "1");

insert into plants_supply VALUES(3 , "1");

insert into plants_supply VALUES(4, "2");

insert into plants_supply VALUES(5 ,"3");

insert into plants_supply values(6, "1");

insert into plants_supply values(7,"5");

insert into plants_supply values(8, "6");

insert into plants_supply values(9, "4");

insert into plants_supply VALUES(10, "4");

select * from plants_supply;
```

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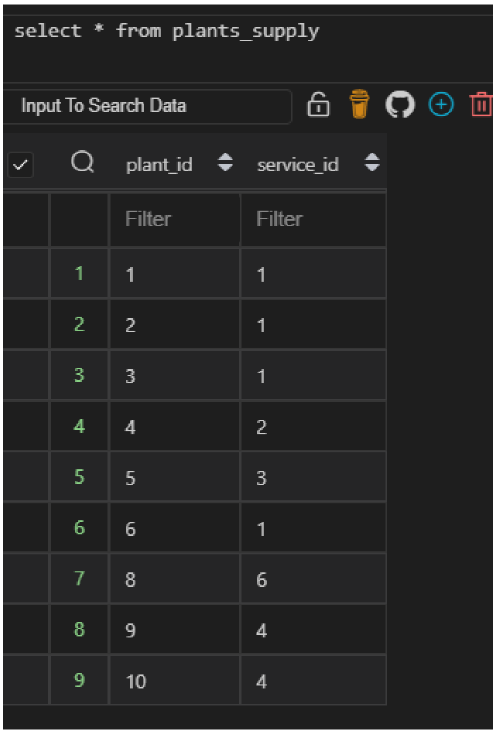

```
select * from plants_supply
```

	plant_id	service_id
	Filter	Filter
1	1	1
2	2	1
3	3	1
4	4	2
5	5	3
6	6	1
7	8	6
8	9	4
9	10	4

/*plants*/

```
insert into plants values(1,"Abelia","mosses",4,"1");

insert into plants values(2,"African Daisies","ferns",3,"2");

insert into plants values(3, "Alfalfa","cone" ,4 , "3");

insert into plants values(4, "Algerian Ivy","flowering",5,"4");

insert into plants values(5,"Flowering Onion","mosses",  2,"5");

insert into plants values(6, "Alpine Aster","ferns",1,"6");

insert into plants values(7,"Abelia","cone",3,"7");

insert into plants values(8, "Beers Breeches","flowering",5,"8");

insert into plants values(9, "Bitter Root","mosses",5,"9");

insert into plants values(10, "Alfalfa","ferns",4,   "10");

select * from plants;
```

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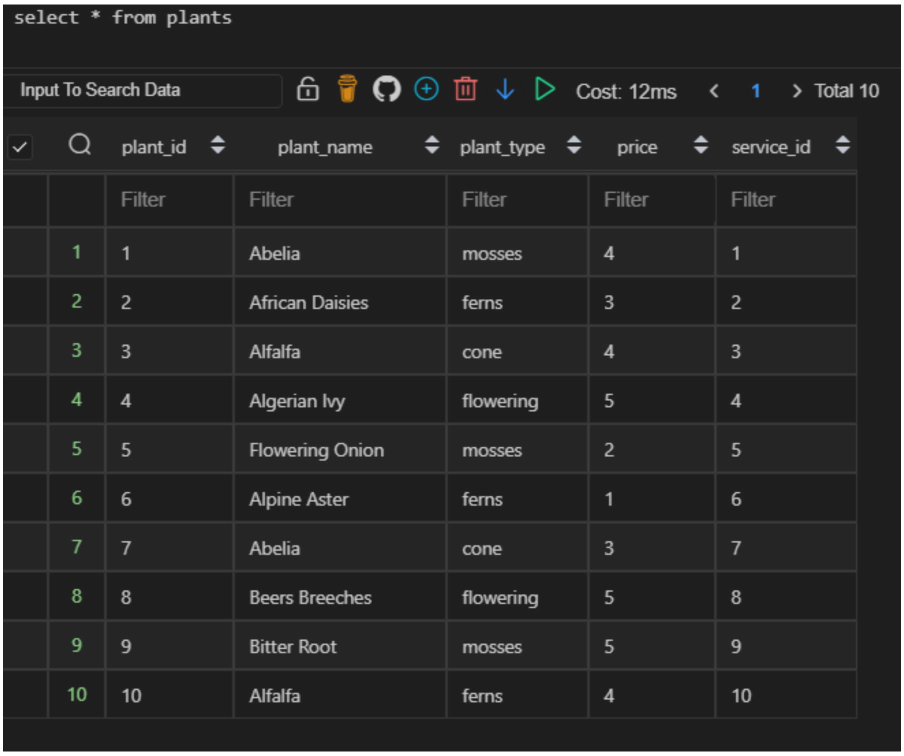

```
select * from plants
```

	plant_id	plant_name	plant_type	price	service_id
	Filter	Filter	Filter	Filter	Filter
1	1	Abelia	mosses	4	1
2	2	African Daisies	ferns	3	2
3	3	Alfalfa	cone	4	3
4	4	Algerian Ivy	flowering	5	4
5	5	Flowering Onion	mosses	2	5
6	6	Alpine Aster	ferns	1	6
7	7	Abelia	cone	3	7
8	8	Beers Breeches	flowering	5	8
9	9	Bitter Root	mosses	5	9
10	10	Alfalfa	ferns	4	10

/*customer_plants*/

```
insert into customer_plants VALUES(3,   "19001","Abelia");

insert into customer_plants VALUES(4,   "19001","African Daisies");

insert into customer_plants VALUES(5, "19003", "Alfalfa");

insert into customer_plants VALUES(6, "19004", "Algerian Ivy");

insert into customer_plants VALUES(7, "19011", "Flowering Onion");

insert into customer_plants VALUES(8, "19011", "Alpine Aster");

insert into customer_plants VALUES(9, "19007", "Abelia");

insert into customer_plants VALUES(10, "19008","Beers Breeches");

insert into customer_plants VALUES(11, "19009", "Bitter root");

insert into customer_plants VALUES(12,"19009", "Alfalfa");

select * from customer_plants;
```

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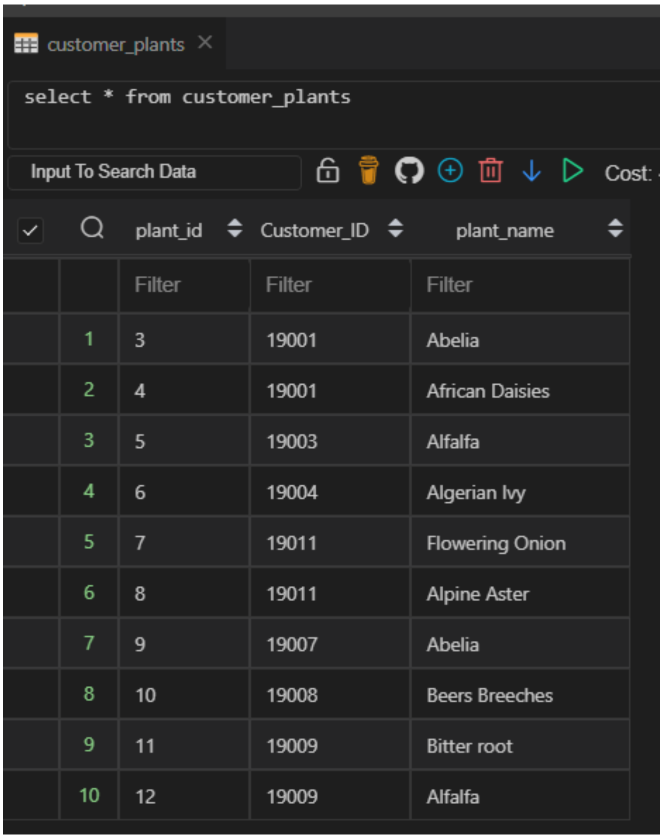

```
select * from customer_plants
```

	plant_id	Customer_ID	plant_name
	Filter	Filter	Filter
1	3	19001	Abelia
2	4	19001	African Daisies
3	5	19003	Alfalfa
4	6	19004	Algerian Ivy
5	7	19011	Flowering Onion
6	8	19011	Alpine Aster
7	9	19007	Abelia
8	10	19008	Beers Breeches
9	11	19009	Bitter root
10	12	19009	Alfalfa

/*Vendor_supply*/

insert into vendor_supply values("V001", 3);

insert into vendor_supply values("V002", 3);

insert into vendor_supply values("V003",2);

insert into vendor_supply values("V004", 1);

insert into vendor_supply values("V005",3);

insert into vendor_supply values("V006", 4);

insert into vendor_supply values("V007", 5);

insert into vendor_supply values("V008", 4);

insert into vendor_supply values("V009", 3);

insert into vendor_supply values("V010", 2);

select * from vendor_supply;

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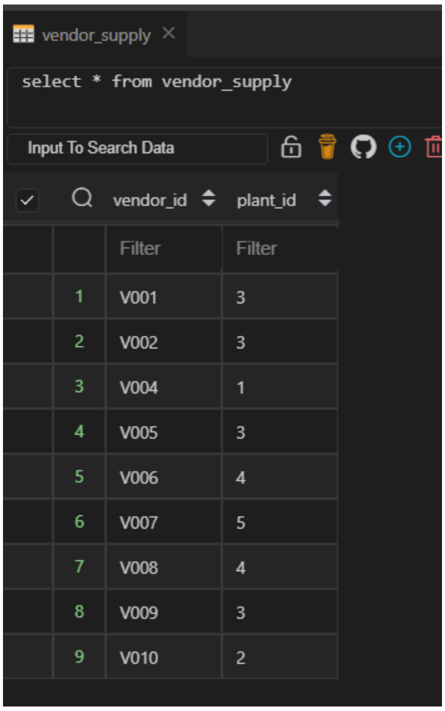

```
select * from vendor_supply
```

	vendor_id	plant_id
1	V001	3
2	V002	3
3	V004	1
4	V005	3
5	V006	4
6	V007	5
7	V008	4
8	V009	3
9	V010	2

/*Vendors*/

```
insert into vendors VALUES("V001","Simes","R","5555", "1309 Miles Rd",75080 ,"7049227448"   ,1);

insert into vendors VALUES("V002","Elver","R",  "8966", "131 Ingle Mountain Dr",75001,"7049222972",2);

insert into vendors VALUES("V003","Cybet","W","6145","1323 Dallas Stanley Hwy",75173, "9818902721" ,3);

insert into vendors VALUES("V004","Metas","W","6901","1328 Rhyne Rd",73301,"7042634524", 4);

insert into vendors VALUES("V005","Anolp","R","6615", "100 Camden Pl",75080,"7704450149", 5);

insert into vendors VALUES("V006","Jalpes","R","4182", "100 Quail Dr",  75001,  "7049227062",6);

insert into vendors VALUES("V007","Emene","W","6602","coit road",75001, "987167829", 10);

insert into vendors VALUES("V008","Aorals","W","4952","9 Hickory Hill Rd",75155,"6106814190", 8);

 insert into vendors VALUES("V009","NonTer","R","3198","9 Hickory Hill Rd",75080,"6783630878",10);

select * from vendors;
```

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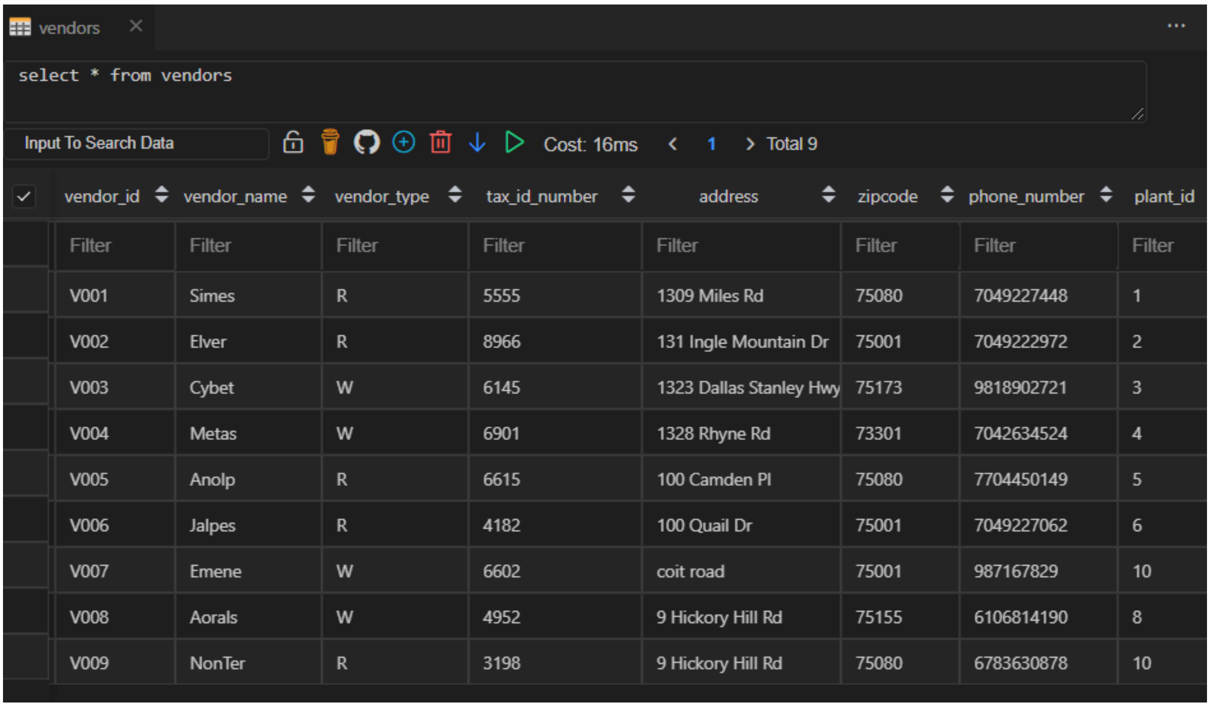

```
select * from vendors
```

vendor_id	vendor_name	vendor_type	tax_id_number	address	zipcode	phone_number	plant_id
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
V001	Simes	R	5555	1309 Miles Rd	75080	7049227448	1
V002	Elver	R	8966	131 Ingle Mountain Dr	75001	7049222972	2
V003	Cybet	W	6145	1323 Dallas Stanley Hwy	75173	9818902721	3
V004	Metas	W	6901	1328 Rhyne Rd	73301	7042634524	4
V005	Anolp	R	6615	100 Camden Pl	75080	7704450149	5
V006	Jalpes	R	4182	100 Quail Dr	75001	7049227062	6
V007	Emene	W	6602	coit road	75001	987167829	10
V008	Aorals	W	4952	9 Hickory Hill Rd	75155	6106814190	8
V009	NonTer	R	3198	9 Hickory Hill Rd	75080	6783630878	10

/*Service_job*/

```
insert into service_job values("J201",    "1",    "C",    "Greenhouse worker");

insert into service_job values("J202",    "1",    "C",    "backyard worker");

insert into service_job values("J203",    "2",    "C",    "florist worker");

insert into service_job values("J204",    "3",    "C",    "farmworker");

insert into service_job values("J205",    "4",    "C",    "horticulturist");

insert into service_job values("J206",    "4",    "C",    "groundskeeper");

insert into service_job values("J207",    "6",    "R" ,   "forester");

insert into service_job values("J208",    "9",    "R",    "labourer");

insert into service_job values("J209",    "8",    "R",    "security guard");

insert into service_job values("J2010",   "7"     , "R",  "Pest controller");

select * from service_job;
```

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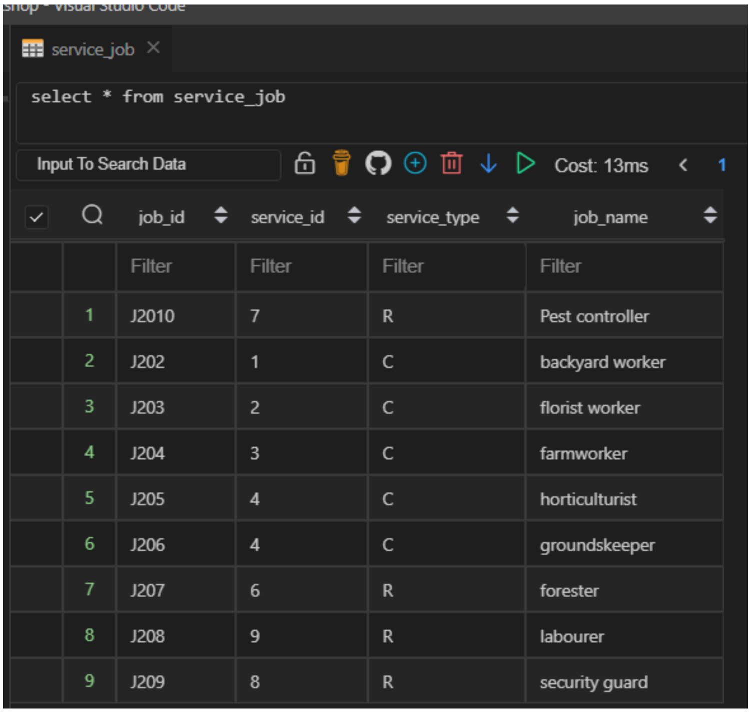

```
select * from service_job
```

	job_id	service_id	service_type	job_name
1	J2010	7	R	Pest controller
2	J202	1	C	backyard worker
3	J203	2	C	florist worker
4	J204	3	C	farmworker
5	J205	4	C	horticulturist
6	J206	4	C	groundskeeper
7	J207	6	R	forester
8	J208	9	R	labourer
9	J209	8	R	security guard

/*Equipments*/

insert into equipments values("E1001", 20210418, 20210726, "1", "J2010");

insert into equipments values("E1002", 20210418, 20210727, "1", "J202");

insert into equipments values("E1003", 20210420 , 20210321, "2", "J203");

insert into equipments values("E1004", 20210421, 20210929, "4" , "J205");

insert into equipments values("E1005", 20210422, 20211027 , "5", "J205");

insert into equipments values("E1006", 20210423, 20210627, "6" , "J207");

insert into equipments values("E1007", 20210424, 20210727, "6", "J207");

insert into equipments values("E1008", 20210425, 20210827, "8", "J209");

insert into equipments values("E1009", 20210426, 20210926, "9", "J208");

insert into equipments values("E1010", 20210427, 20210819, "2" , "J203");

select * from equipments;

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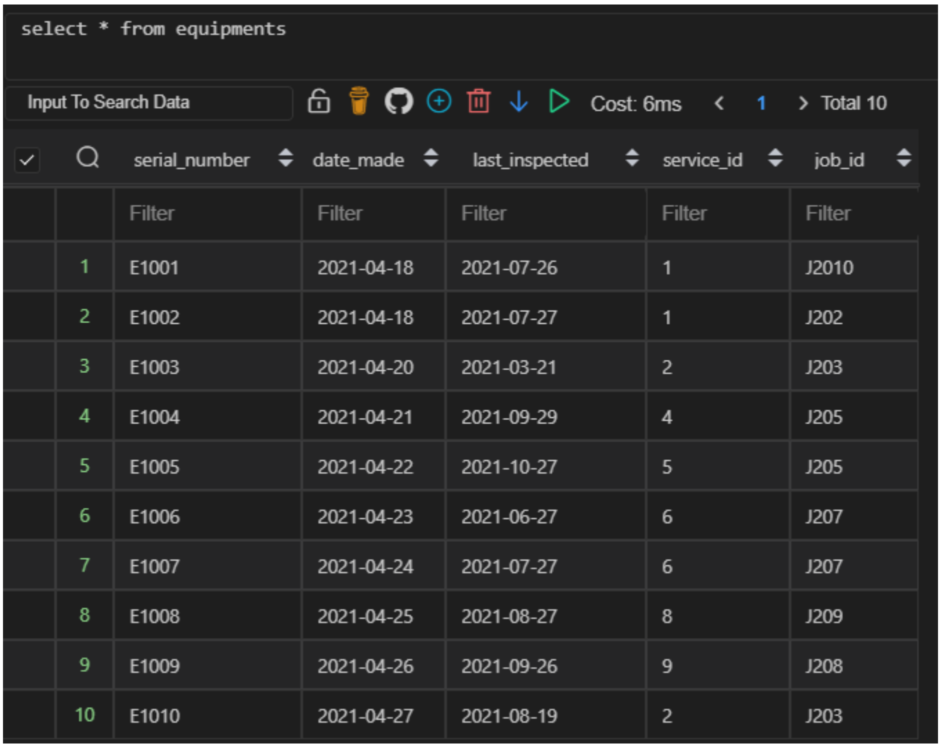

```
select * from equipments
```

	serial_number	date_made	last_inspected	service_id	job_id
	Filter	Filter	Filter	Filter	Filter
1	E1001	2021-04-18	2021-07-26	1	J2010
2	E1002	2021-04-18	2021-07-27	1	J202
3	E1003	2021-04-20	2021-03-21	2	J203
4	E1004	2021-04-21	2021-09-29	4	J205
5	E1005	2021-04-22	2021-10-27	5	J205
6	E1006	2021-04-23	2021-06-27	6	J207
7	E1007	2021-04-24	2021-07-27	6	J207
8	E1008	2021-04-25	2021-08-27	8	J209
9	E1009	2021-04-26	2021-09-26	9	J208
10	E1010	2021-04-27	2021-08-19	2	J203

/* Equipment_Training */

```
insert into equipment_training VALUES(1001,    "T1001_TR",     "E1001");

insert into equipment_training VALUES(1002,    "T1002_TR",     "E1002");

insert into equipment_training VALUES(1003,    "T1003_TR",     "E1003");

insert into equipment_training VALUES(1004,    "T1004_TR",     "E1004");

insert into equipment_training VALUES(1005,    "T1005_TR",     "E1005");

insert into equipment_training VALUES(1006,    "T1006_TR",     "E1006");

insert into equipment_training VALUES(1007,    "T1007_TR",     "E1007");

insert into equipment_training VALUES(1008,    "T1008_TR",     "E1008");

insert into equipment_training VALUES(1009,    "T1009_TR",     "E1009");

insert into equipment_training VALUES(1010,    "T1010_TR",     "E1010");

select * from equipment_training;
```

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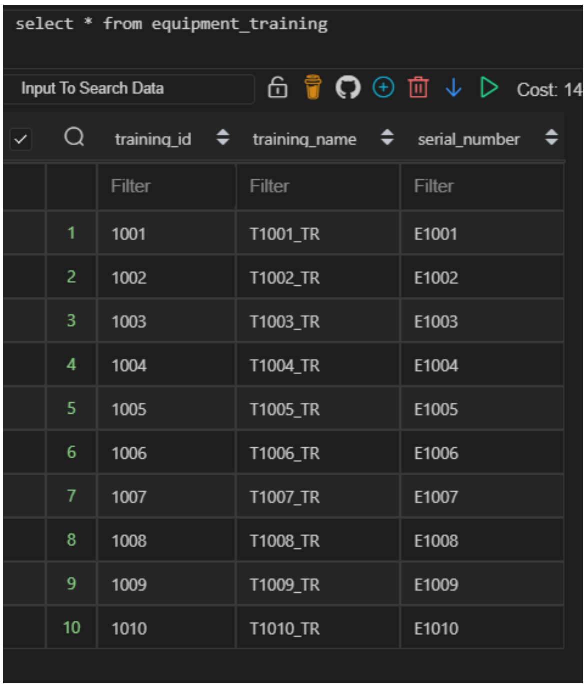

```
select * from equipment_training
```

	training_id	training_name	serial_number
	Filter	Filter	Filter
1	1001	T1001_TR	E1001
2	1002	T1002_TR	E1002
3	1003	T1003_TR	E1003
4	1004	T1004_TR	E1004
5	1005	T1005_TR	E1005
6	1006	T1006_TR	E1006
7	1007	T1007_TR	E1007
8	1008	T1008_TR	E1008
9	1009	T1009_TR	E1009
10	1010	T1010_TR	E1010

/*Equipment_repair*/

```
INSERT into equipment_repair VALUES("R1001","E1001",        10,      "469 Tunnel Drive
Leggett",73301);

INSERT into equipment_repair VALUES("R1002","E1002",        10,      "833 Jockey Hollow Drive
",75001);

INSERT into equipment_repair VALUES("R1003","E1003",        11,      "14 W. Sunset St.
Ennis",75002);

INSERT into equipment_repair VALUES("R1004","E1004",        12,      "35 Auburn Rd. San",75014
);

INSERT into equipment_repair VALUES("R1005","E1005",        12,      "3 Grace St. Austin"
,75023);

INSERT into equipment_repair VALUES("R1006","E1006",        12,      "9995 El Dorado Circle
Alvin",   75035);

INSERT into equipment_repair VALUES("R1007","E1007",        11,      "208 Front Lane
Edgewood",75080);

INSERT into equipment_repair VALUES("R1008","E1008",        11,       "208 Front Lane
Edgewood",75224);

INSERT into equipment_repair VALUES("R1009","E1009",        13,      "8 Bayberry Ave.
Rowlet",75173);

INSERT into equipment_repair VALUES("R1010","E1010",        13,      "961 Harbor Avenue
San",75155);
```

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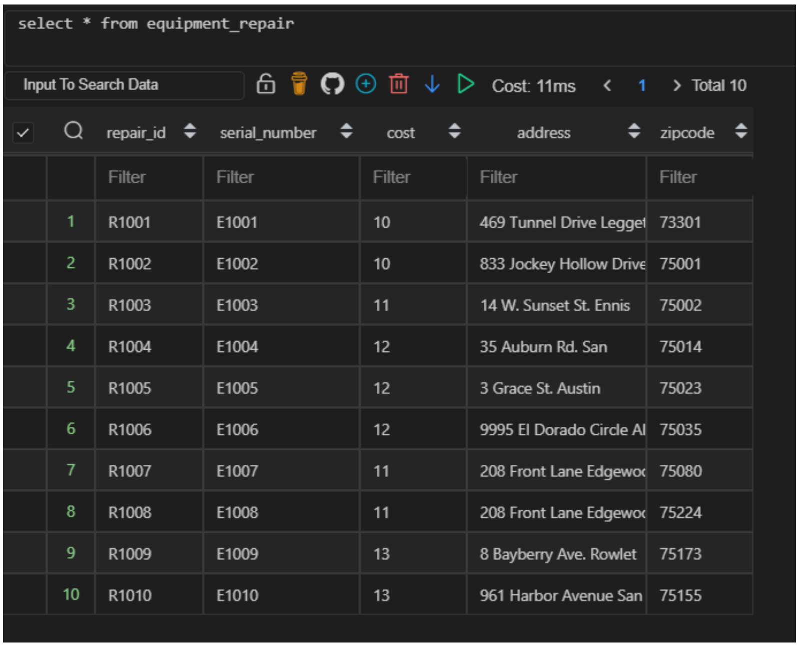
select * from equipment_repair;



```
select * from equipment_repair
```

	repair_id	serial_number	cost	address	zipcode
	Filter	Filter	Filter	Filter	Filter
1	R1001	E1001	10	469 Tunnel Drive Legget	73301
2	R1002	E1002	10	833 Jockey Hollow Drive	75001
3	R1003	E1003	11	14 W. Sunset St. Ennis	75002
4	R1004	E1004	12	35 Auburn Rd. San	75014
5	R1005	E1005	12	3 Grace St. Austin	75023
6	R1006	E1006	12	9995 El Dorado Circle Al	75035
7	R1007	E1007	11	208 Front Lane Edgewoc	75080
8	R1008	E1008	11	208 Front Lane Edgewoc	75224
9	R1009	E1009	13	8 Bayberry Ave. Rowlet	75173
10	R1010	E1010	13	961 Harbor Avenue San	75155

/*worker*/

```
INSERT into worker VALUES("W001",   "S0198",     25,    "W12", "J202",  1002);

INSERT into worker VALUES("W001",   "S0198",     25,    "W12", "J201", 1001);

INSERT into worker VALUES("W002",   "S0987" ,    34,    "W12", "J202"   ,1002);

INSERT into worker VALUES("W002",   "S0989",     19,    "W12", "J203",  1003);

INSERT into worker VALUES("W004",   "M0489",     32,    "W12", "J204",1004);

INSERT into worker VALUES("W005",   "A0578",     23,    "W12", "J205",1004);

INSERT into worker VALUES("W006",   "J0652",     35,    "W12", "J206" ,1005);

INSERT into worker VALUES("W007",   "E0713",     23,    "W12", "J207",  1007);

INSERT into worker VALUES("W008",   "S0998",     34,    "W12", "J208",  1008);

INSERT into worker VALUES("W009",   "S0919",     35,    "W12", "J209",  1009);

SELECT * from worker;
```

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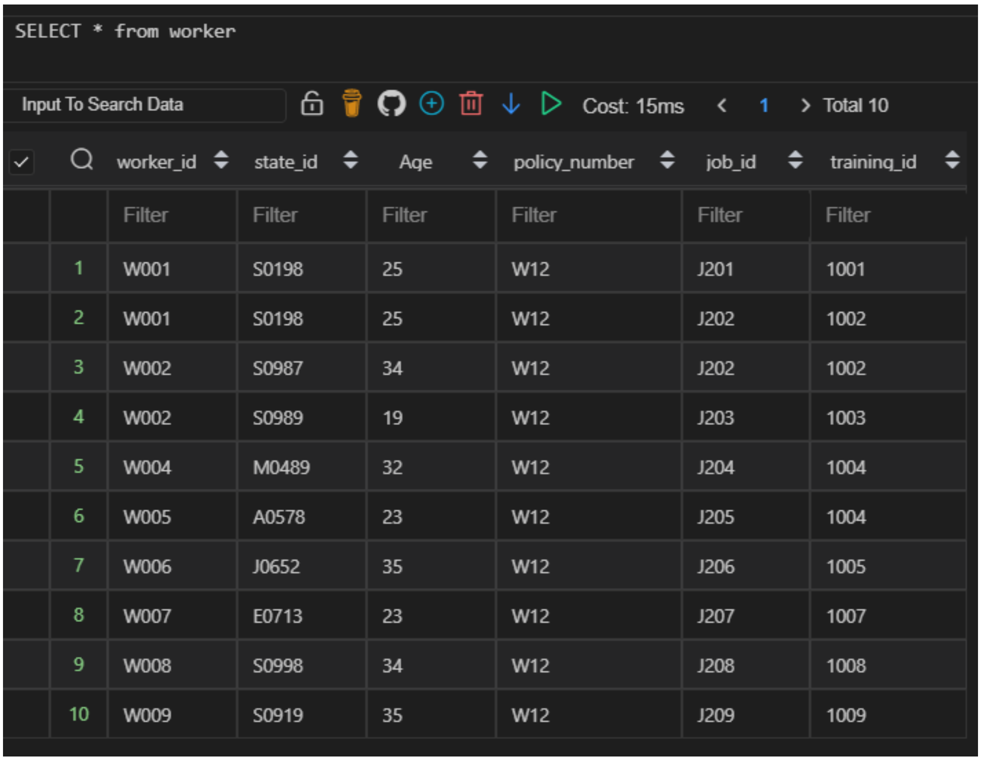


```
SELECT * from worker
```

Input To Search Data Cost: 15ms 1 Total 10

	worker_id	state_id	Age	policy_number	job_id	training_id
	Filter	Filter	Filter	Filter	Filter	Filter
1	W001	S0198	25	W12	J201	1001
2	W001	S0198	25	W12	J202	1002
3	W002	S0987	34	W12	J202	1002
4	W002	S0989	19	W12	J203	1003
5	W004	M0489	32	W12	J204	1004
6	W005	A0578	23	W12	J205	1004
7	W006	J0652	35	W12	J206	1005
8	W007	E0713	23	W12	J207	1007
9	W008	S0998	34	W12	J208	1008
10	W009	S0919	35	W12	J209	1009

/***/

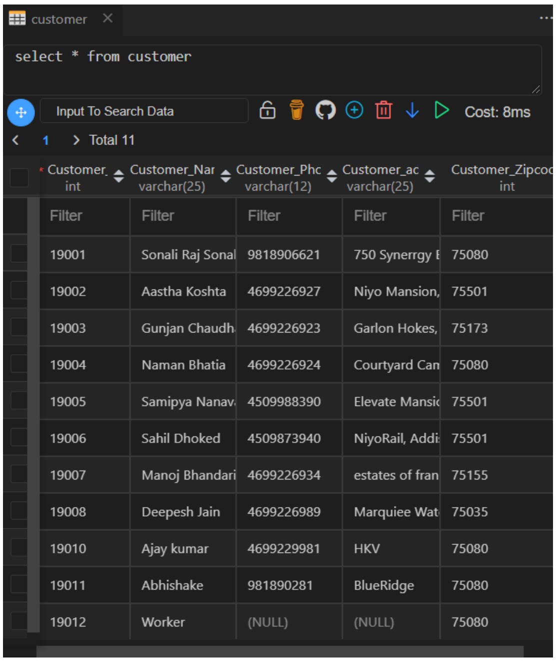
/* 5. Chose at least 2 tables from our project and;

a. Show your table records; /*

/*Code:.* show all the customers from customer table/*/

/*show all the plants that customer owns*/

select * from customer;



```
select * from customer
```

Input To Search Data Cost: 8ms

1 Total 11

Customer_ int	Customer_Nar varchar(25)	Customer_Phc varchar(12)	Customer_ac varchar(25)	Customer_Zipcoc int
Filter	Filter	Filter	Filter	Filter
19001	Sonali Raj Sonal	9818906621	750 Synerrgy E	75080
19002	Aastha Koshta	4699226927	Niyo Mansion,	75501
19003	Gunjan Chaudh	4699226923	Garlon Hokes,	75173
19004	Naman Bhatia	4699226924	Courtyard Can	75080
19005	Samipya Nanav	4509988390	Elevate Mansic	75501
19006	Sahil Dhoked	4509873940	NiyoRail, Addi	75501
19007	Manoj Bhandari	4699226934	estates of fran	75155
19008	Deepesh Jain	4699226989	Marquiee Wat	75035
19010	Ajay kumar	4699229981	HKV	75080
19011	Abhishake	981890281	BlueRidge	75080
19012	Worker	(NULL)	(NULL)	75080

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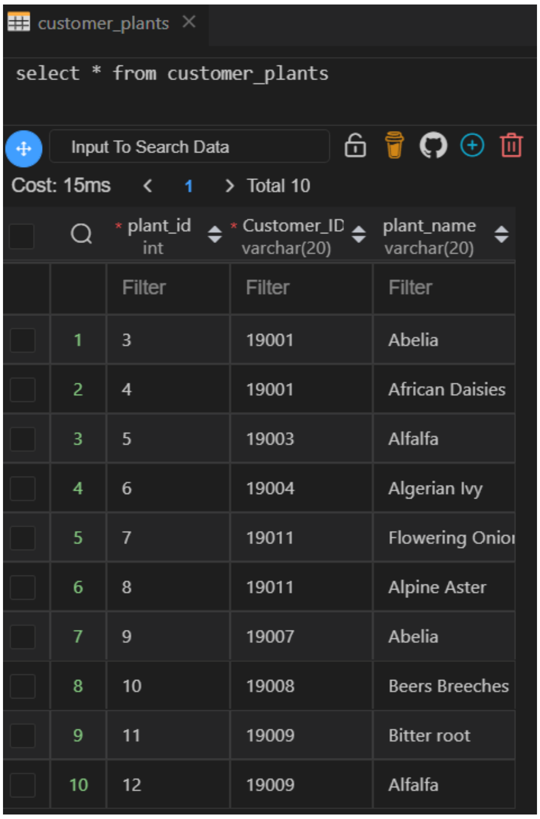
select * from customer_plants



```
select * from customer_plants
```

		plant_id int	Customer_ID varchar(20)	plant_name varchar(20)
		Filter	Filter	Filter
□	1	3	19001	Abelia
□	2	4	19001	African Daisies
□	3	5	19003	Alfalfa
□	4	6	19004	Algerian Ivy
□	5	7	19011	Flowering Onioı
□	6	8	19011	Alpine Aster
□	7	9	19007	Abelia
□	8	10	19008	Beers Breeches
□	9	11	19009	Bitter root
□	10	12	19009	Alfalfa

/***/

/*b. Create inner joins between two tables and explain what is the purpose of your join ?*/

/*Query:*/

select c.Customer_ID , C.Customer_Name, O.order_id, O.service_id,

s.service from customer as C INNER JOIN orders as O

on C.Customer_ID = O.Customer_ID INNER JOIN services as s on s.service_id = O.service_id

where s.service = "R";

/*Purpose: display all the customers orders who have opted for residential services.*/

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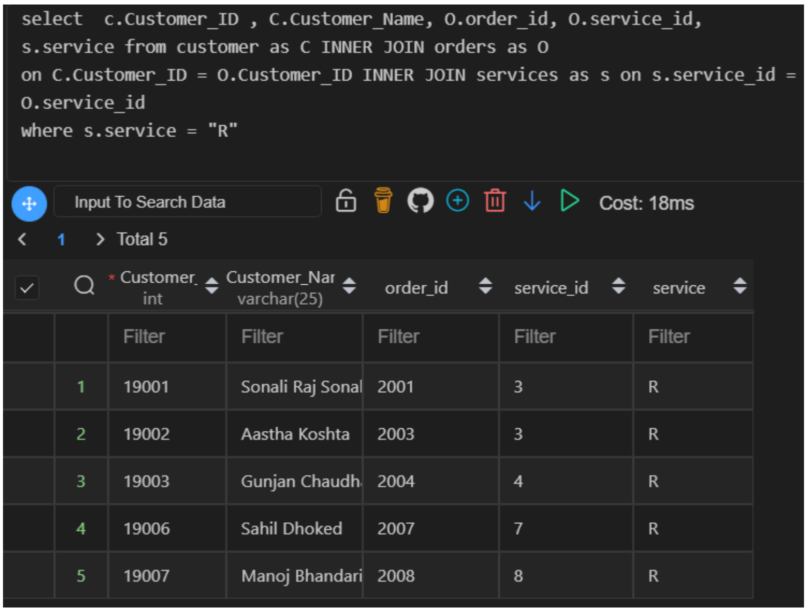

```
select  c.Customer_ID , C.Customer_Name, O.order_id, O.service_id,
s.service from customer as C INNER JOIN orders as O
on C.Customer_ID = O.Customer_ID INNER JOIN services as s on s.service_id =
O.service_id
where s.service = "R"
```

	* Customer. int	Customer_Nar varchar(25)	order_id	service_id	service
	Filter	Filter	Filter	Filter	Filter
1	19001	Sonali Raj Sonal	2001	3	R
2	19002	Aastha Koshta	2003	3	R
3	19003	Gunjan Chaudh	2004	4	R
4	19006	Sahil Dhoked	2007	7	R
5	19007	Manoj Bhandari	2008	8	R

/*c) Create full joins between two tables and explain what is the purpose of your join ?*/

/*Purpose: Display the plant details existing in the garden service and display if customer _details exists of the plants*/

/*Query*/

select c.customer_ID, p.plant_id from customer as c right join customer_plants as p on c.customer_ID = p.customer_ID

UNION

select cp.customer_ID ,pp.plant_id from plants as pp left join customer_plants as cp on cp.plant_id = pp.plant_id;

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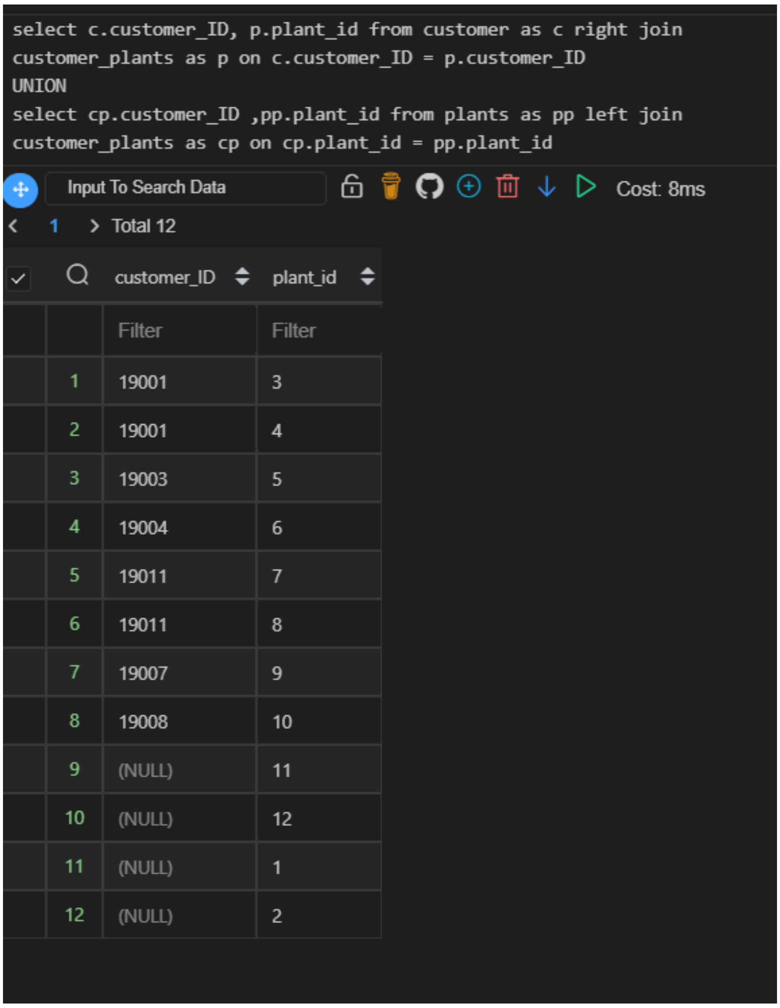

```
select c.customer_ID, p.plant_id from customer as c right join
customer_plants as p on c.customer_ID = p.customer_ID
UNION
select cp.customer_ID ,pp.plant_id from plants as pp left join
customer_plants as cp on cp.plant_id = pp.plant_id
```

	customer_ID	plant_id
	Filter	Filter
1	19001	3
2	19001	4
3	19003	5
4	19004	6
5	19011	7
6	19011	8
7	19007	9
8	19008	10
9	(NULL)	11
10	(NULL)	12
11	(NULL)	1
12	(NULL)	2

/*d.) Create left outer joins between two tables and explain what is the purpose of your join*/

/*Query */

select s.service_id, s.service , s.service_name,p.policy_number,

p.type, p.term_price from services as s left OUTER JOIN insurance as p

on s.service_id = p.service_id;

/*Purpose: display all the services from garden services and matching insurance

from the insurance table*/

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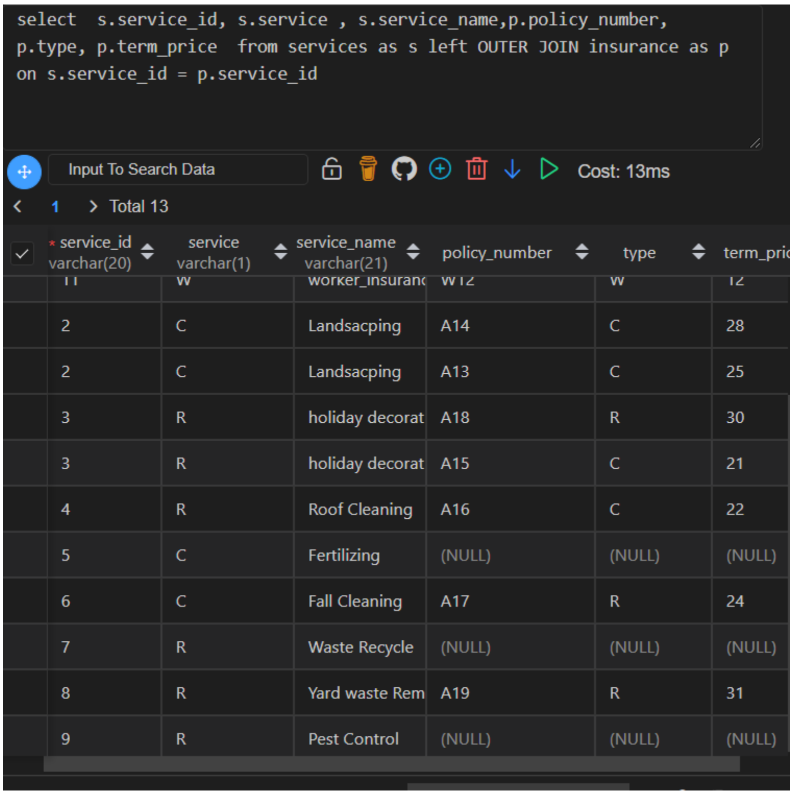

```
select  s.service_id, s.service , s.service_name,p.policy_number,
p.type, p.term_price  from services as s left OUTER JOIN insurance as p
on s.service_id = p.service_id
```

	* service_id varchar(20)	service varchar(1)	service_name varchar(21)	policy_number	type	term_pric
	11	W	worker_insuranc	W12	W	12
	2	C	Landsacping	A14	C	28
	2	C	Landsacping	A13	C	25
	3	R	holiday decorat	A18	R	30
	3	R	holiday decorat	A15	C	21
	4	R	Roof Cleaning	A16	C	22
	5	C	Fertilizing	(NULL)	(NULL)	(NULL)
	6	C	Fall Cleaning	A17	R	24
	7	R	Waste Recycle	(NULL)	(NULL)	(NULL)
	8	R	Yard waste Rem	A19	R	31
	9	R	Pest Control	(NULL)	(NULL)	(NULL)

/*e) Create right outer joins between two tables and explain what is the purpose of your join ?*/

/*Query*/

Select s.job_id, s.job_name, e.serial_number , e.service_id

from equipments as e RIGHT OUTER JOIN service_job as s

on e.job_id = s.job_id;

/*Purpose: display all the service jobs used in the garden services and the equipments used in service job * /

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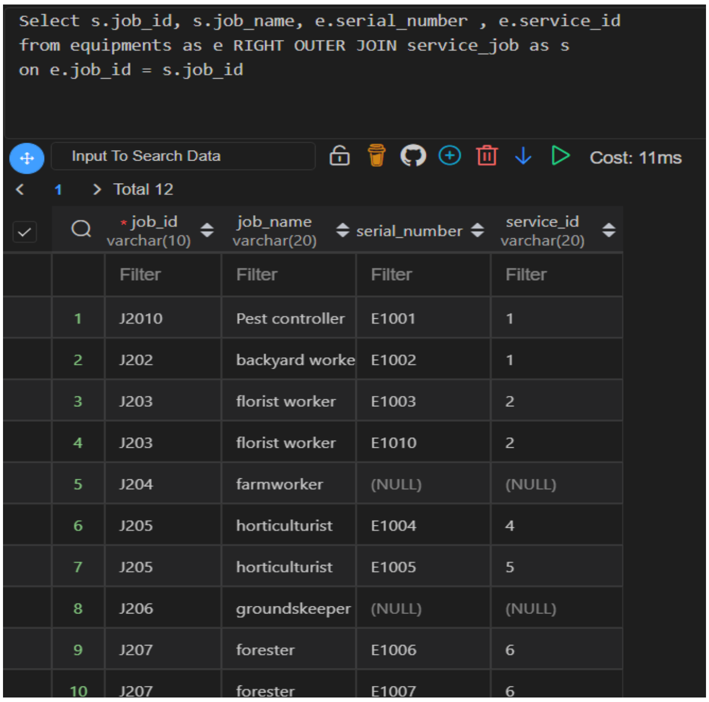

```
Select s.job_id, s.job_name, e.serial_number , e.service_id
from equipments as e RIGHT OUTER JOIN service_job as s
on e.job_id = s.job_id
```

	*job_id varchar(10)	job_name varchar(20)	serial_number	service_id varchar(20)
	Filter	Filter	Filter	Filter
1	J2010	Pest controller	E1001	1
2	J202	backyard worke	E1002	1
3	J203	florist worker	E1003	2
4	J203	florist worker	E1010	2
5	J204	farmworker	(NULL)	(NULL)
6	J205	horticulturist	E1004	4
7	J205	horticulturist	E1005	5
8	J206	groundskeeper	(NULL)	(NULL)
9	J207	forester	E1006	6
10	J207	forester	E1007	6

/*f. Create intersect between two tables and explain what is the purpose of your intersect */

/* intersect -> IN*/

/*Purpose*/

/*Display vendors who provide plants which are owned by the customer*/

/*query*/

select v.vendor_id, v.vendor_name , v.tax_id_number, v.plant_id

from vendors as v where v.plant_id in (select p.plant_id from customer_plants as p);

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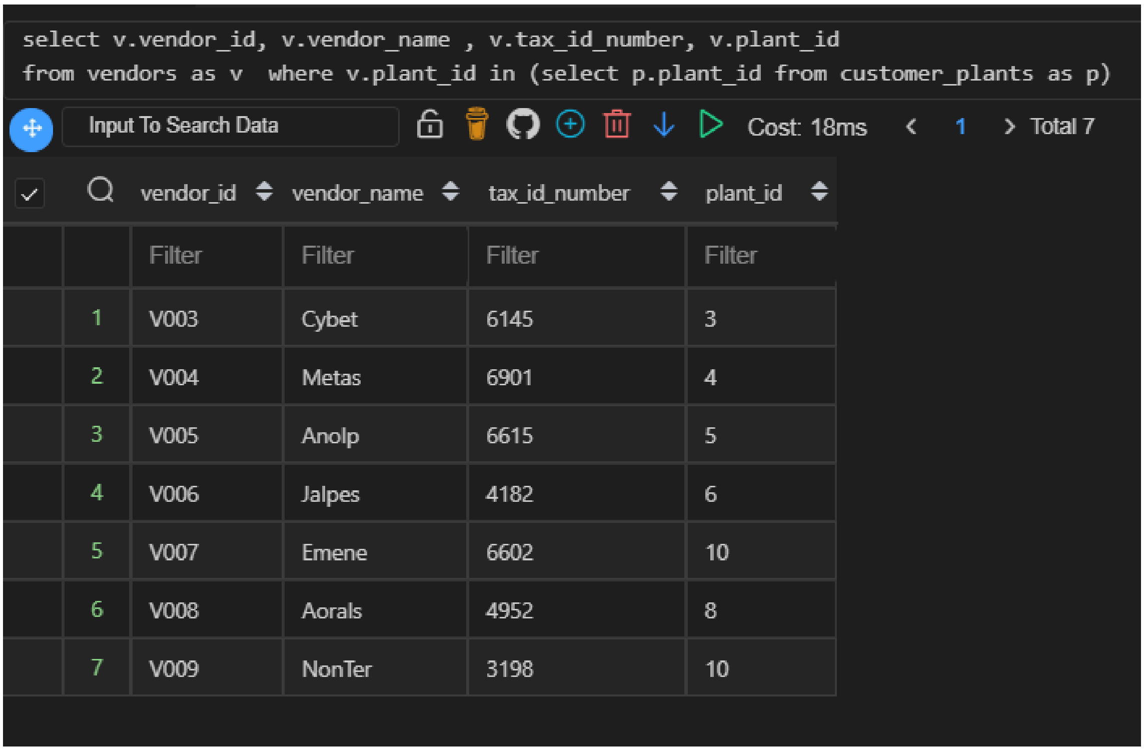

```
select v.vendor_id, v.vendor_name , v.tax_id_number, v.plant_id
from vendors as v  where v.plant_id in (select p.plant_id from customer_plants as p)
```

	vendor_id	vendor_name	tax_id_number	plant_id
	Filter	Filter	Filter	Filter
1	V003	Cybet	6145	3
2	V004	Metas	6901	4
3	V005	Anolp	6615	5
4	V006	Jalpes	4182	6
5	V007	Emene	6602	10
6	V008	Aorals	4952	8
7	V009	NonTer	3198	10

/*g. Create union between two tables and explain what is the purpose of your union? */

/*Query */

select w.worker_id, w.age, w.job_id from worker as w where w.age > 21

UNION

select wa.worker_id,wa.age, wa.job_id from worker as wa where wa.job_id in (select job_id from service_job

where service_type = "C");

/* **Purpose :** UNION gives all the rows which are used in both the select statements not only the identical ones */

/*displaying all workers details who are greater than 21 years or works in a commercial job*/

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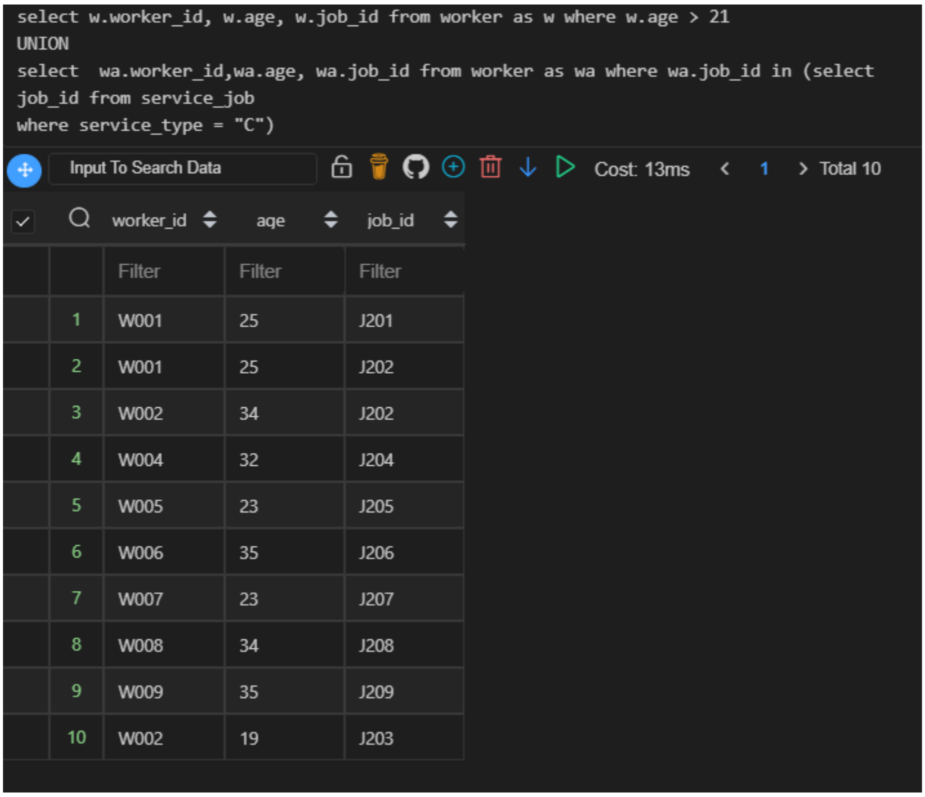


```
select w.worker_id, w.age, w.job_id from worker as w where w.age > 21
UNION
select  wa.worker_id,wa.age, wa.job_id from worker as wa where wa.job_id in (select
job_id from service_job
where service_type = "C")
```

	worker_id	age	job_id
1	W001	25	J201
2	W001	25	J202
3	W002	34	J202
4	W004	32	J204
5	W005	23	J205
6	W006	35	J206
7	W007	23	J207
8	W008	34	J208
9	W009	35	J209
10	W002	19	J203

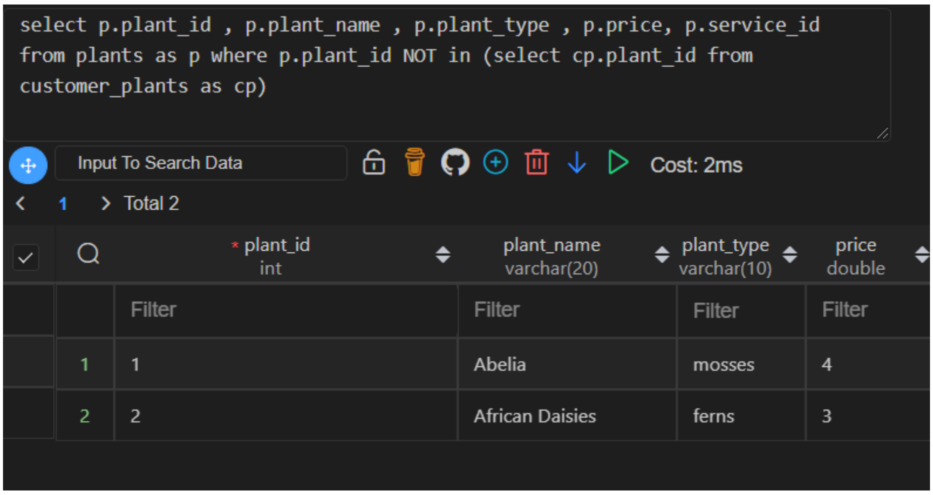
/*h. Create except between two tables and explain what is the purpose of your except?*/

/*Except -> not in MYSQL*

/*Query */

select p.plant_id , p.plant_name , p.plant_type , p.price, p.service_id

from plants as p where p.plant_id NOT in (select cp.plant_id from customer_plants as cp) ;



```
select p.plant_id , p.plant_name , p.plant_type , p.price, p.service_id
from plants as p where p.plant_id NOT in (select cp.plant_id from
customer_plants as cp)
```

	* plant_id int	plant_name varchar(20)	plant_type varchar(10)	price double
1	1	Abelia	mosses	4
2	2	African Daisies	ferns	3

/***Purpose**: display the plants existing in garden services which are not owned by any customer*/

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