

Group name: Sixth group

Schema Definitions and Query Implementations

Table Creation:

Using SQL statement, we created 11 tables as follows:

- client:

CREATE TABLE client

```
( Id          VARCHAR(10) NOT NULL,
  firstN      VARCHAR(9)  NOT NULL,
  lastN       VARCHAR(9)  NOT NULL,
  Password    VARCHAR(25) NOT NULL,
  address     VARCHAR(25) NOT NULL,
  e_mail      VARCHAR(25) NOT NULL,
```

PRIMARY KEY (id));

- supplier:

CREATE TABLE supplier

```
( Id_C        VARCHAR(10) NOT NULL,
  account     VARCHAR(9)  NOT NULL check (length(account )=10),
  unique(account ),
  PRIMARY KEY(id_C),
  FOREIGN KEY (id_C ) REFERENCES client (id) on delete set null);
```

- Purchaser:

CREATE TABLE purchaser

```
( Id_C        VARCHAR(10) NOT NULL,
  billing_address VARCHAR(25) NOT NULL,
  PRIMARY KEY(id_C),
  FOREIGN KEY (id_C ) REFERENCES client (id));
```

- client_phone:

CREATE TABLE client_phone

```
( C_id          VARCHAR(10) NOT NULL,  
  C_phone      VARCHAR(10) NOT NULL,  
    PRIMARY KEY(C_id,C_phone),  
    FOREIGN KEY (C_id) REFERENCES client (id));
```

- item:

CREATE TABLE item

```
( ITEM_id          VARCHAR(10) NOT NULL,  
  ITEM_items_language VARCHAR(25) NOT NULL,  
  ITEM_used_months   INT      NOT NULL,  
  ITEM_described     VARCHAR(150) NOT NULL,  
  ITEM_manufacturer_name VARCHAR(25) NOT NULL,  
  ITEM_starting_bid_price FLOAT      NOT NULL,  
  ITEM_start_date    DATE      NOT NULL,  
  ITEM_end_date      DATE      NOT NULL,  
  ITEM_name          VARCHAR(15) NOT NULL,  
  C_id              VARCHAR(10) NOT NULL,  
    PRIMARY KEY(ITEM_id) ,  
    FOREIGN KEY (C_id ) REFERENCES client (id),  
    CONSTRAINT ITEM_end_date CHECK(ITEM_end_date>= ITEM_start_date));
```

- computer:

CREATE TABLE computer

```
( Id_i          VARCHAR(10) NOT NULL,  
  Speed         VARCHAR(9)  NOT NULL,  
  Memory        VARCHAR(9)  NOT NULL,  
  storage       VARCHAR(9)  NOT NULL,  
  FOREIGN KEY (id_i ) REFERENCES item (ITEM_id)on delete set null);
```

- printer:

CREATE TABLE printer

```
( Id_i          VARCHAR(10) NOT NULL,
  addition_is_wireless CHAR(1)      NOT NULL,
  is_contin_scanner   CHAR(1)      NOT NULL,
  Inkject            VARCHAR(10) NOT NULL,
  FOREIGN KEY (id_i ) REFERENCES item (ITEM_id)on delete cascade);
```

- bids:

CREATE TABLE bids

```
( Id          VARCHAR(10) NOT NULL,
  proposed_price  FLOAT      NOT NULL,
  bid_date       DATE        NOT NULL,
  I_id          VARCHAR(10) NOT NULL,
  C_id          VARCHAR(10) NOT NULL,
  PRIMARY KEY(id),
  FOREIGN KEY (C_id ) REFERENCES client (id),
  FOREIGN KEY (I_id ) REFERENCES item (ITEM_id));
```

- billing:

CREATE TABLE billing

```
( Id          VARCHAR(10) NOT NULL,
  date_b       DATE        NOT NULL,
  bids_id      VARCHAR(10) NOT NULL,
  PRIMARY KEY(id),
  FOREIGN KEY (bids_id) REFERENCES bids (id)on delete set null);
```

- feedbacks:

CREATE TABLE feedbackss

```
( C_id          VARCHAR(10) NOT NULL,
  Rating        INT          NOT NULL,
  description    VARCHAR(150) NOT NULL,
  bill_id       VARCHAR(10) NOT NULL,
```

```
PRIMARY KEY(C_id, rating, bill_id),  
FOREIGN KEY (C_id) REFERENCES client (id) on delete set null,  
FOREIGN KEY (bill_id) REFERENCES billing (id) on delete set null,  
CONSTRAINT RATING CHECK(rating BETWEEN 1 AND 5));
```

Addition Tables Tor The Bonus :

- commition:

```
CREATE TABLE commition
```

```
( id          VARCHAR(10)  NOT NULL,  
  billing_id   VARCHAR(10)  NOT NULL,  
  pro_price    FLOAT        NOT NULL,  
  Hcommition   FLOAT,
```

```
PRIMARY KEY(id),
```

```
CONSTRAINT pro_price CHECK(pro_price >= 100),
```

```
FOREIGN KEY (billing_id) REFERENCES billing (id) on delete set null);
```

- Advertising:

```
CREATE TABLE Advertising
```

```
( Item_id      VARCHAR(10)  NOT NULL,  
  Date_adv     VARCHAR(10)  NOT NULL,  
  ADV_price    FLOAT        NOT NULL,
```

```
PRIMARY KEY(Item_id),
```

```
FOREIGN KEY (Item_id) REFERENCES item (ITEM_id) on delete set null);
```

- support:

```
CREATE TABLE support
```

```
( id          VARCHAR(10)  
  Suggestion   CHAR(1)  
  Problem      CHAR(1)  
  enquiry      CHAR(1)
```

```
PRIMARY KEY(id, suggestion),
```

```
FOREIGN KEY (id) REFERENCES client (id) on delete set null);
```

We chose many tables to apply the referential integrity constraints including:

- 1- Supplier : we chose to set null to Foreign key(Id_C) when delete the primary key(id from client table)**
- 2- Printer :we chose to cascade to foreign key(Id_I) in case update or delete the primary key(ITEM_id from item table)**
- 3- Billing : we chose to set null to foreign key when delete the primary key(id from bids table)**

Database State:

We insert some values into the database in order to test our SQL create view and query statement.

● INSERTION OF TABLES:

1. Client table:

insert into client

values('1000000001','ghadeer','Alshalawi','gha12345','diyrab-7765','ghad2@gmail.com')

insert into client

values('1000000002','saud','Alsaad','qwert12345','Alswadi-7765','SudAl@gmail.com')

insert into client

values('1000000003','mohammed','Alqhtani','Aa300300','alnasem-1165','almoh@gmail.com')

insert into client

values('1000000004','Hanan','Almutairi','jhaT376','Alraed-7765','hanan@gmail.com')

insert into client

```
values('1000000005','Ajjad','Alghami','gybmnuT765','Tuwaiq-7432','ajjad@gmail.com')
```

```
insert into client
```

```
values('1000000006','Nahed','Almutairi','abimdV6528','Tuwaiq-7432','nahed@gmail.com')
```

```
insert into client
```

```
values ('1000000007','nora','yoseef','sgjklrtyu','Suwaidi-3807','nono8@gmail.com')
```

```
insert into client
```

```
values ('1000000008','sara','abdullah','sfHvth','Salam-3690','soso4h@gmail.com ')
```

```
insert into client
```

```
values ('1000000009','ahmad','sad','56789uhggvd','narjes-8565','ah7859@gmail.com')
```

```
insert into client
```

```
values ('1000000010','rawan','nasser','edfghjk','yassmen-8643','rawannasser4@gmail.com')
```

2. Supplier table:

```
insert into supplier
```

```
values('1000000001','4453679812')
```

```
insert into supplier
```

```
values('1000000003','2619750076')
```

```
insert into supplier
```

```
values('1000000004','4512345877')
```

```
insert into supplier
```

```
values('1000000006','4512287774')
```

```
insert into Supplier
```

```
values ('1000000007','1111222333')
```

```
insert into Supplier
```

```
values ('1000000008','3857693765')
```

3. Purchaser table:

```
-----  
insert into purchaser  
values('1000000001','diyrab-3443')  
-----
```

```
insert into purchaser  
values('1000000002','Alswadi-7765')  
-----
```

```
insert into purchaser  
values('1000000006','Tuwaiq-1476')  
-----
```

```
insert into purchaser  
values('1000000005','Alraed-7765')  
-----
```

```
insert into purchaser  
values ('1000000009','yassmen-8643')  
-----
```

```
insert into purchaser  
values ('1000000010','Suwaidi-3807')  
-----
```

4. Client_phone table:

```
-----  
insert into client_phone  
values('1000000001','0504210815')  
-----
```

```
insert into client_phone  
values('1000000002','0554210815')  
-----
```

```
insert into client_phone  
values('1000000003','0532306778')  
-----
```

```
insert into client_phone  
values('1000000004','0535678123')  
-----
```

```
insert into client_phone  
values('1000000005','0532345679')  
-----
```

```
insert into client_phone  
values('1000000006','0539765443')  
-----
```

```
insert into client_phone  
values ('1000000007','0538846431')  
-----
```

```
insert into client_phone
values ('10000000008','0537482736')
```

```
insert into client_phone
values ('10000000009','0052846284')
```

```
insert into client_phone
values ('10000000010','0528746874')
```

5. Item table:

```
insert into item
values('1112','arb/eng',24,'personal computer','Hp', 8500.0 , date'2021-12-25' , date'2022-02-15' , 'HPsz10','10000000003')
```

```
insert into item
values('1111','english',24,'lightwight laptop','asuse', 4500.0 , date'2021-11-15' , date'2022-02-15' , 'zinbook','10000000001')
```

```
insert into item
values('1113','arabic',12,'portable computer','apple', 5500.0 , date'2021-12-1' , date'2022-03-1' , 'micbook','10000000003')
```

```
insert into item
values('1011','arabic',6,'multifunction printer','Hp', 350.0 , date'2021-12-04' , date'2022-1-04' , 'deskjet','10000000001')
```

```
insert into item
values('1012','arabic',12,'laser printer white color','Hp', 2200.0 , date'2021-10-01' , date'2022-2-01' , 'Jetpro','10000000001')
```

```
insert into item
values('1013','arb\eng',24,'injekt printer black color','canon', 159.0 , date'2021-8-25' , date'2022-3-25' , 'dejs1','10000000003')
```

```
insert into item
values('5380','english',19,'laptop','Hp', 6600.0 ,date'2021-12-13' , date'2022-01-29' , 'pavilion' , '10000000004')
```

```
insert into item
values('7639','arabic',6,'personal computer','apple', 11000.0 ,date'2022-2-01' , date'2022-04-11' , 'Imac','10000000006')
```

insert into item

values('9697','arabic',2, 'Multi-function Machine','Epson', 5008.78.0 , date'2022-1-11' ,
date'2022-2-26' , 'EcoTank' , '10000000004')

insert into item

values ('2221','arabic',4,'Central computer','HP',40000.50,date'2022-11-1',date'2022-12-
12','hp235','10000000007')

insert into item

values ('2222','arabic',1,'Personal computer','apple',30000.50,date'2022-11-1',date'2022-
12-12','mac93','10000000008')

insert into item

values ('2224','english',6,'black and white ink printer','Samsung',1000,date'2022-11-
1',date'2022-12-12','Samsung8761','10000000007')

insert into item

values ('2225','english',4,'Wireless printer','canon',2000,date'2022-11-1',date'2022-12-
12','Samsung8761','10000000007')

6. Computer table:

insert into computer

values('1112','5.4 GHz','Ram8 GB','1HDD')

insert into computer

values('1111','2.4 GHz','Ram8 GHz','512Sdd')

insert into computer

values('1113','3.4 GHz','Ram16 GHz','512Sdd')

insert into computer

values('5380','4.6 GHz','Ram 4 GB','1HDD')

insert into computer

values('7639','6.8 GHz','Ram 8 GB')

```
insert into computer
values ('2221','4 GHz','Ram9 GB','1HDD')
```

```
insert into computer
values ('2222','4 GHz','Ram8 GB','1HDD')
```

7. Printer table:

```
insert into printer
values('1013','T','T','2')
```

```
insert into printer
values('1012','F','T','4')
```

```
insert into printer
values('1011','T','T','2')
```

```
insert into printer
values('9697','T','T','2')
```

```
insert into printer
values ('2224','F','T','1')
```

```
insert into printer
values ('2225','t','t','2')
```

8. Bids table:

```
insert into bids
values('118',8700,date'2022-1-27','1112','1000000001')
```

```
insert into bids
values('117',4000,date'2021-11-27','1111','1000000002')
```

```
insert into bids
values('119',400,date'2021-12-21','1011','1000000002')
```

```
-----  
insert into bids  
values('114',4200 , date'2021-1-20', '9697','10000000005')  
-----
```

```
insert into bids  
values('115',5600 , date'2021-1-21', '5380','10000000006')  
-----
```

```
insert into bids  
values ('111',4002.22,date'2022-11-1','2221','10000000009')  
-----
```

```
insert into bids  
values ('112',5200.4,date'2022-11-1','2222','10000000010')  
-----
```

```
insert into bids  
values ('113',3200,date'2022-11-1','2224','10000000009')  
-----
```

9. Billing table:

```
-----  
insert into billing  
values('506',date'2021-11-21','117')  
-----
```

```
insert into billing  
values('507',date'2021-12-27','119')  
-----
```

```
insert into billing  
values('508',date'2022-1-22','118')  
-----
```

```
insert into billing  
values('57889012', date'2022-04-11', '114')  
-----
```

```
insert into billing  
values('57889013', date'2022-03-11-', '115')  
-----
```

```
insert into billing  
values ('500',date'2022-12-12','111')  
-----
```

```
insert into billing
values ('501',date'2022-12-12','112')
```

```
insert into billing
values ('502',date'2022-12-12','113')
```

10. Feedbackss table:

```
insert into feedbackss
values ('1000000009',3,'not bad','500')
```

```
insert into feedbackss
values ('1000000010',5,'veeeery good i like it','501')
```

```
insert into feedbackss
values('1000000005',2,'I am completely satisfied', '57889012')
```

```
insert into feedbackss
values('1000000006',1,'I hope it is better than this', '57889012')
```

```
insert into feedbackss
values('1000000001',3,'The item is scratched','507')
```

```
insert into feedbackss
values('1000000002',5,'great','508')
```

Insertion For The Bonus Tables :

11. commition table:

```
insert into commition
```

```
values('600','500',4002.22,4002.22*0.01)
```

```
insert into commition
```

```
values('601','501',5200.4,5200.4*0.01)
```

```
insert into commition
```

```
values('602','502',3200,3200*0.01)
```

```
insert into commition
```

```
values('603','57889012',4200,4200*0.01)
```

```
insert into commition
```

```
values('605','57889013',5600,5600*0.01)
```

```
insert into commition
```

```
values('607','506',4000,4000*0.01)
```

```
insert into commition
```

```
values('608','507',400,400*0.01)
```

```
insert into commition
```

```
values('609','508',8700,8700*0.01)
```

12. Advertising table:

```
Insert into Advertising
```

```
Value('1112',date'2021-12-23',340.99)
```

```
Insert into Advertising
```

```
Value('1111',date'2021-12-13',320.12)
```

Insert into Advertising

Value('1113',date'2021-12-24',300.89)

Insert into Advertising

Value('1011',date'2021-12-18',321.0)

Insert into Advertising

Value('1012',date'2021-01-21',290.99)

Insert into Advertising

Value('1013',date'2021-02-14',250.79)

13. support table:

insert into support

values ('10000000001','t','f','f')

insert into support

values ('10000000002','t','f','f')

insert into support

values ('10000000005','f','f','t')

insert into support

values ('10000000006','f','f','t')

insert into support

values ('10000000009','f','t','f')

```
insert into support
values ('1000000010','t','f','f')
```

Screenshot:

Table 1 shows the states for **Client** Database Schema

Client:

ID	FIRSTN	LASTN	PASSWORD	ADDRESS	E_MAIL
1000000007	nora	yoseef	sgjklrtyu	Suwaidi-3807	nono8@gmail.com
1000000008	sara	abdullah	sfHvth	Salam-3690	soso4h@gmail.com
1000000009	ahmad	sad	56789uhggvd	narjes-8565	ah7859@gmail.com
1000000010	rawan	nasser	edfghjk	yassmen-8643	rawannasser4@gmail.com
1000000004	Hanan	Almutairi	jhaT376	Alraed-7765	hanan@gmail.com
1000000005	Ajyad	Algthami	gybmnuT765	Tuwaiq-7432	ajyad@gmail.com
1000000006	Nahed	Almutairi	abimdV6528	Tuwaiq-7432	nahed@gmail.com
1000000001	ghadeer	Alshalawi	gha12345	diyrab-7765	ghad2@gmail.com
1000000002	saud	Alsaad	qwert12345	Alswadi-7765	SudAl@gmail.com
1000000003	mohammed	Alqhtani	Aa300300	alnasem-1165	almoh@gmail.com

Table 2 shows the states for **Client_phone** Database Schema.

Client_phone:

C_ID	C_PHONE
1000000001	0504210815
1000000002	0554210815
1000000003	0532306778
1000000004	0535678123
1000000005	0532345679
1000000006	0539765443
1000000007	0538846431
1000000008	0537482736
1000000009	0052846284
1000000010	0528746874

Table 3 shows the states for supplier Database Schema.

supplier:

ID_C	ACCOUNT
1000000007	1111222333
1000000008	3857693765
1000000004	4512345877
1000000006	4512287774
1000000001	4453679812
1000000003	2619750076

Table 4 shows the states for purchaser Database Schema.

purchaser:

ID_C	BILLING_ADDRESS
1000000009	yassmen-8643
1000000010	Suwaidi-3807
1000000006	Tuwaiq-1476
1000000005	Alraed-7765
1000000001	diyrab-3443
1000000002	Alswadi-7765

Table 5 shows the states for item Database Schema.

item:

ITEM_ID	ITEM_ITEMS_LANGUAGE	ITEM_USED_MONTHS	ITEM_DESCRIBED	ITEM_MANUFACTURER_NAME	ITEM_STARTING_BID_PRICE	ITEM_START_DATE	ITEM_END_DATE	ITEM_NAME	C_ID
2221	arabic	4	Central computer	HP	40000.5	01-NOV-22	12-DEC-22	hp235	1000000007
2222	arabic	1	Personal computer	apple	30000.5	01-NOV-22	12-DEC-22	mac93	1000000008
2224	english	6	black and white ink printer	Samsung	1000	01-NOV-22	12-DEC-22	Samsung8761	1000000007
2225	english	4	Wireless printer	canon	2000	01-NOV-22	12-DEC-22	Samsung8761	1000000007
5380	english	19	laptop	Hp	6600	13-DEC-21	29-JAN-22	pavilion	1000000004
9697	arabic	2	Multi-function Machine	Epson	5008.78	11-JAN-22	26-FEB-22	EcoTank	1000000004
1112	arb/eng	24	personal computer	Hp	8500	25-DEC-21	15-FEB-22	HPsz10	1000000003
1111	english	24	lightweight laptop	asuse	4500	15-NOV-21	15-FEB-22	zinbook	1000000001
1113	arabic	12	portable computer	apple	5500	01-DEC-21	01-MAR-22	micbook	1000000003
1011	arabic	6	multifunction printer	Hp	350	04-DEC-21	04-JAN-22	deskjet	1000000001
1012	arabic	12	laser printer white color	Hp	2200	01-OCT-21	01-FEB-22	Jetpro	1000000001
1013	arab/eng	24	inkjet printer black color	canon	159	25-AUG-21	25-MAR-22	deis1	1000000003

Table 6 shows the states for printer Database Schema.

printer:

ID_I	ADDITION_IS_WIRELESS	IS_CONTIN_SCANNER	INKJECT
2224	f	T	1
2225	t	t	2
9697	T	T	2
1013	T	T	2
1012	F	T	4
1011	T	T	2

Table 7 shows the states for computer Database Schema.

computer:

ID_I	SPEED	MEMORY	STORAGE
2221	4 GHz	Ram9 GB	1HDD
2222	4 GHz	Ram8 GB	1HDD
5380	4.6 GHz	Ram 4 GB	1HDD
1112	5.4 GHz	Ram8 GB	1HDD
1111	2.4 GHz	Ram8 GHz	512Sdd
1113	3.4 GHz	Ram16 GHz	512Sdd

Table 8 shows the states for bids Database Schema.

bids:

ID	PROPOSED_PRICE	BID_DATE	I_ID	C_ID
111	4002.22	01-NOV-22	2221	1000000009
112	5200.4	01-NOV-22	2222	1000000010
113	3200	01-NOV-22	2224	1000000009
114	4200	20-JAN-21	9697	1000000005
115	5600	21-JAN-21	5380	1000000006
118	8700	27-JAN-22	1112	1000000001
117	4000	27-NOV-21	1111	1000000002
119	400	21-DEC-21	1011	1000000002

Table 9 shows the states for **billing** Database Schema.

billing:

ID	DATE_B	BIDS_ID
500	12-DEC-22	111
501	12-DEC-22	112
502	12-DEC-22	113
57889012	11-APR-22	114
57889013	11-MAR-22	115
506	21-NOV-21	117
507	27-DEC-21	119
508	22-JAN-22	118

Table 10 shows the states for **feedbackss** Database Schema.

feedbackss:

C_ID	RATING	DESCRIPTION	BIIL_ID
1000000009	3	not bad	500
1000000010	5	veeeery good i like it	501
1000000005	2	I am completely satisfied	57889012
1000000002	4	nice	506
1000000001	3	The item is scratched	507
1000000002	5	great	508
1000000006	1	I hope it is better than this	57889012

[Download CSV](#)

Table 11 shows the states for commotion Database Schema.

commotion:

ID	BILLING_ID	PRO_PRICE	HCOMMITION
600	500	4002.22	40.0222
605	57889013	5600	56
609	508	8700	87
608	507	400	4
603	57889012	4200	42
607	506	4000	40
601	501	5200.4	52.004
602	502	3200	32

Table 12 shows the states for Advertising Database Schema.

Advertising:

ITEM_ID	DATE_ADV	ADV_PRICE
1011	18-DEC-21	321
1112	23-DEC-21	340.99
1113	24-DEC-21	300.89
1012	21-JAN-21	290.99
1013	14-FEB-21	250.79
1111	13-DEC-21	320.12

Table 13 shows the states for Support Database Schema.

Support:

ID	SUGGESTION	PROBLEM	ENQUIRY
1000000005	f	f	t
1000000006	f	f	t
1000000001	t	f	f
1000000010	t	f	f
1000000009	f	t	f
1000000002	t	f	f

[Download CSV](#)

Query Implementation:

1- Display the number of all feedbacks from the client with id number (1000000005):

```
SELECT    COUNT (*)
FROM      feedbackss
WHERE     C_id = 1000000005
```

Explanation : In this query we want to display the number of feedbacks form specific client, in some companies if the client reach a specific number of feedbacks they well git a discount.

2- Return client id that buy from apple personal computer:

```
SELECT C_id
FROM item
WHERE ITEM_DESCRIBED='Personal computer'
and ITEM_MANUFACTURER='apple'
```

Explanation : Here we want to return all client ids that they by from manufacturer apple and the description of this item is personal computer, this query may help to rank the client's interest.

3- Display all bids in date (2021-1-20):

```
SELECT      *
FROM        bids
WHERE       bid_date= date'2021-1-20'
```

Explanation : We want to display all the bids in specific day, that's help with statistics (as a documentation for the company).

4- Display a list of client with first name stating with “A”

```
select *
from client
where firstN LIKE'A%'
```

Explanation: In this query Displays the first name who starts “A” For example, we want to search for the name of the person so that we can remember his name well

5- reteieve client id,name and rating who rating between 1-3

```
select id,firstN ,lastN ,rating
from client ,feedbackss
where id=c_id and (rating between 1 and 3)
```

Explanation: We show people whose rating is low to find out the reason for the low rating

6- Display a list of each client id stored by low to high

```
select id
from client
```

order by id asc

Explanation : Display the ID client from the smallest to the largest in order to arrange a database

7- Returns the price of the item with the highest proposed price:

```
select max(proposed_price)
from bids ,item
where I_id=ITEM_id
```

Explanation : Its purpose is to find the highest bid value out of all bids

8- return all the names of the bids winners and their proposed price:

```
select distinct firstN ,lastN ,proposed_price
from client , bids
where client.id=bids.C_id
```

Explanation : To find all the winners of all the bids on the site and their winning prices for the bids

9- View is used to store the bids which the purchasers in it rated it 4 or more:

```
create view rate_high as
select bids_id
from feedbackss ,billing
where biil_id=billing.id and rating>=4
```

Explanation : View to facilitate access to successful bids in which purchasers were satisfied

10- View is used to store the supplier information :

```
create view supplier_info as
select firstN ,lastN ,account
from supplier ,client
where Id_C=id
```

Explanation : view for easy access to all supplier information

11- return all suppliers information :

```
select * from supplier_info
```

Explanation: To find all supplier information on the site