**DATA BASE MANAGEMENT SYSTEM PROJECT**

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**197220**

**TITLE : RESTAURANT DATA BASE MANAGEMENT SYSTEM**

**PROJECT OVERVIEW**

The Restaurant database management system is to automate day to day activity of a restaurant. Restaurant is a kind of business that serves people all over world with ready-made food. This system is to provide service facility to restaurant and also to the customer. This restaurant management system can be used by employees in a restaurant to handle the clients, their orders and can help them easily find free tables or place orders. The services that are provided is food ordering and reservation table management by the customer through the system, customer information management and waiter information management, menu information management and report. After a successful login the customer can access the menu page with the items listed according to the desired time. The main point of this system is to help restaurant administrator manage the restaurant business and help customer for online ordering and reserve table. The user can search for a menu according to his choice i.e. according to price range and category of food and later he can order a meal.

Our main objective to design this project is to make a sustainability in restaurant services by creating a data base to it so that we can reduce the order processing time , digitalize the data and create a great customer experience .This leads to a great improvement in restaurant management and increases the profit of a restaurant

Our assumptions

* Restaurant works on day to day basis,(all items are renewed everyday).

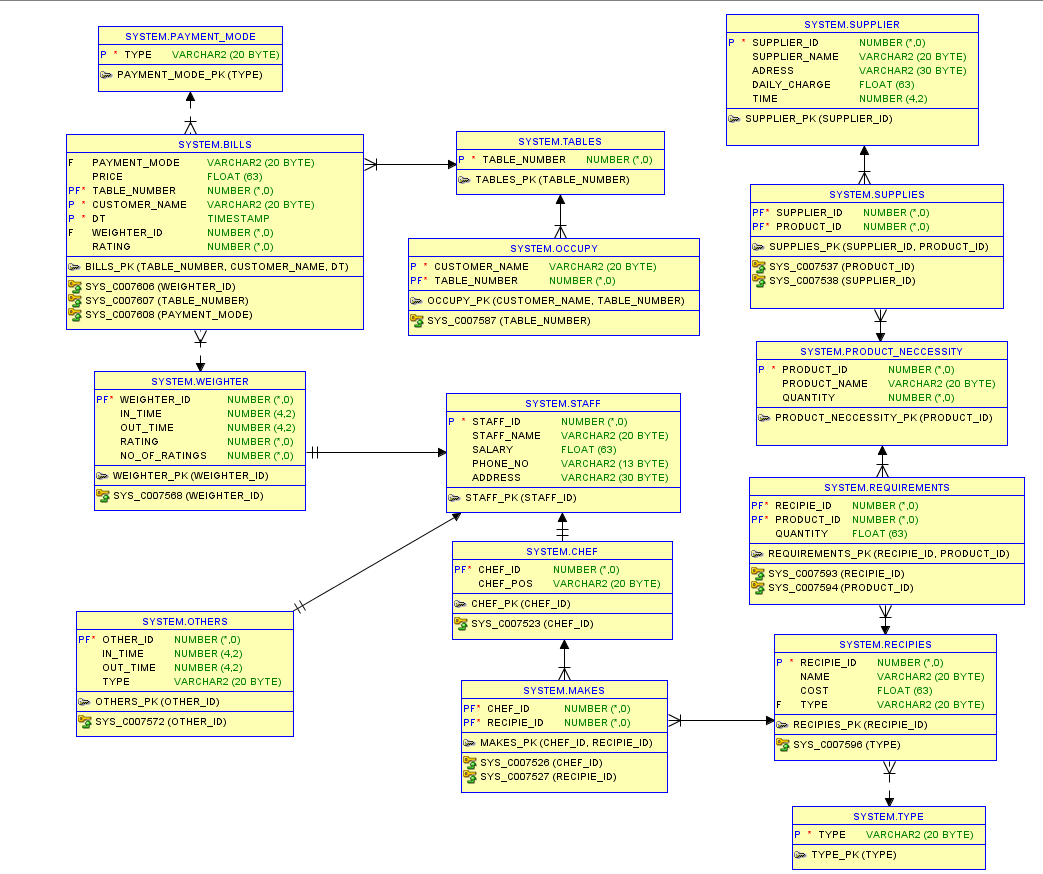
DATABASE STRUCTURE

Our database contains total 12 tables out of it main tables are recipes, staff, bills and occupy and remaining tables all point to these tables using foreign key

|  |  |
| --- | --- |
| DATABASE TABLES | DESCRIPTION |
| Staff | This table consists all the staff id ,name and there personal information |
| Waiter | This is a weak entity set which maintains through a foreign key of staff id and it consists of there rating and work timings |
| chef | This is a weak entity set which depends on staff table by a foreign key of staff id and it give details of there positions |
| Others | This is also a weak entity set which maintains timings of other staff it has foreign key of staff id from staff table |
| Recipes | It contains all the recipes made in restaurant and there coast and id |
| Bills | This table give details of customer bills and the rating given to waiters |
| Occupy | This table tells us the customer they occupied table |
| Orders | This table gives us orders made by customers |
| Product\_necessity | This table gives all the requirements for the recipes |
| Supplier | This table tells suppliers giving the product necessity |
| Tables | It gives all the table numbers |
| Payment mode | It gives different mode of payments |
|  |  |

**OVERALL EXPERIENCE**

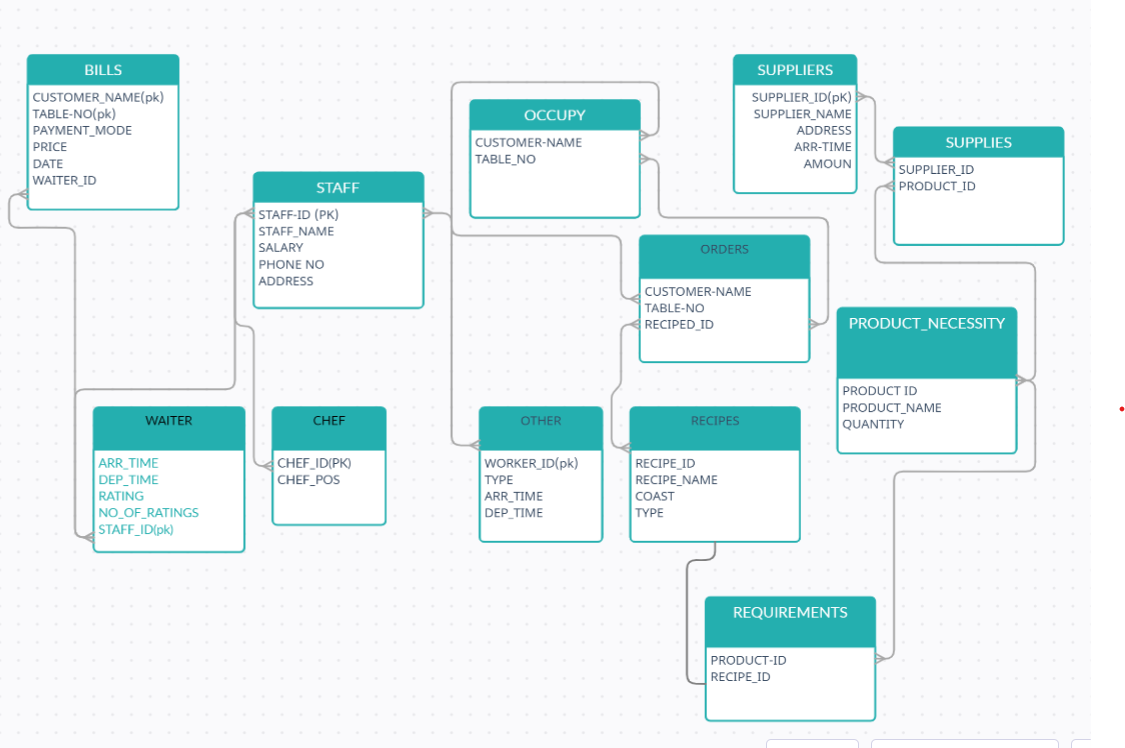
**With this project we have learned overall experience of creating the complete data base management system and running it and also learnt how important database management system plays in our day to day life**

**ER DIAGRAM**

(neglect the system prefix. Diagram is generated by SQL developer

To show that there is no difference between the actual ER and our database)

**TABLE STRUCTURE**



CREATION OF TABLES

staff

create table staff(staff\_id int primary key,staff\_name varchar(20),salary real,phone\_no varchar(13),address varchar(30));

chef

create table chef(chef\_id int primary key , chef\_pos varchar(20),foreign key(chef\_id) references staff(staff\_id));

type

create table type(type varchar(20) primary key);

recipies

create table recipies(recipie\_id int primary key,name varchar(20));

alter table recipies add(cost real);

alter table recipies add(type varchar(20),foreign key(type) references type(type));

makes

create table makes(chef\_id int,recipie\_id int,primary key(chef\_id,recipie\_id),

foreign key (chef\_id) references chef(chef\_id),foreign key (recipie\_id) references recipies(recipie\_id));

product neccessity

create table product\_neccessity(product\_id int primary key,product\_name varchar(20),quantity int);

supplier

create table supplier(supplier\_id int primary key,supplier\_name varchar(20),adress varchar(30));

alter table supplier add(daily\_charge real,time number(4,2));

supplies

create table supplies(supplier\_id int,product\_id int,primary key(supplier\_id,product\_id),

foreign key(product\_id) references product\_neccessity(product\_id),foreign key(supplier\_id) references supplier(supplier\_id));

weighter

create table weighter(weighter\_id int primary key,in\_time number(4,2),out\_time number(4,2),foreign key(weighter\_id) references staff(staff\_id));

ALTER TABLE WEIGHTER ADD (RATING INT);

alter table weighter add no\_of\_ratings int ;

others

create table others(other\_id int primary key,in\_time number(4,2),out\_time number(4,2),foreign key(other\_id) references staff(staff\_id) ,type varchar(20));

requirements

create table requirements(recipie\_id int,product\_id int,foreign key(recipie\_id) references recipies(recipie\_id),foreign key(product\_id) references product\_neccessity(product\_id),primary key(recipie\_id,product\_id));

alter table requirements add quantity real;

payment mode

create table payment\_mode(type varchar(20) primary key);

tables

create table tables (table\_number int primary key);

bills

create table bills(payment\_mode varchar(20),price real,table\_number int,customer\_name varchar(20),DT TIMESTAMP,

WEIGHTER\_ID INT,RATING INT, FOREIGN KEY(WEIGHTER\_ID) REFERENCES WEIGHTER(WEIGHTER\_ID),

foreign key(table\_number) references tables(table\_number),

foreign key(payment\_mode) references payment\_mode(type),PRIMARY KEY(TABLE\_NUMBER,CUSTOMER\_NAME,DT));

occupy

create table occupy(customer\_name varchar(20),table\_number int,

foreign key(table\_number) references tables(table\_number),primary key(customer\_name,table\_number));

orders

create table orders(customer\_name varchar(20),table\_number int,recipie\_id int, quantity int,

foreign key(customer\_name,table\_number)REFERENCES occupy(customer\_name,table\_number),foreign key(recipie\_id) references recipies(recipie\_id),

unique(customer\_name,table\_number,recipie\_id));

TRIGGERS ON TABLES

/

CREATE OR REPLACE TRIGGER BILLS

BEFORE INSERT ON BILLS

FOR EACH ROW

BEGIN

UPDATE WEIGHTER SET RATING=(RATING\*NO\_OF\_RATINGS+:NEW.RATING)/(NO\_OF\_RATINGS+1) WHERE WEIGHTER\_ID=:NEW.WEIGHTER\_ID;

UPDATE WEIGHTER SET NO\_OF\_RATINGS=NO\_OF\_RATINGS+1 WHERE WEIGHTER\_ID=:NEW.WEIGHTER\_ID;

DELETE FROM OCCUPY WHERE :NEW.CUSTOMER\_NAME=OCCUPY.CUSTOMER\_NAME AND (:NEW.TABLE\_NUMBER=OCCUPY.TABLE\_NUMBER);

END;

/

create or replace trigger weighter

before insert

on weighter for each row

BEGIN

:NEW.no\_of\_ratings:=0;

:NEW.RATING:=0;END;

/

QUERRIES ON TABLES

INSERT INTO STAFF VALUES (831,'RAVI',10000,9390187654,'BHPL');

INSERT INTO STAFF VALUES (832,'RASHI',15000,9666599876,'HYD');

INSERT INTO STAFF VALUES (833,'RAHUL',11000,9831245678,'HYD');

INSERT INTO STAFF VALUES (834,'RUPA',12000,9786654123,'MANGALIGIRI');

INSERT INTO STAFF VALUES (835,'RAHEEM',18000,9873456789,'BHPL');

INSERT INTO STAFF VALUES (836,'SUBBA RAO',20000,9807653423,'KADAPA');

INSERT INTO STAFF VALUES (837,'SUHAS',16000,9367856243,'KHAMMAM');

INSERT INTO STAFF VALUES (838,'SOURAV',18000,9875634211,'RAMPUL');

INSERT INTO STAFF VALUES (839,'MANI',20000,9657845321,'JADCHERALA');

INSERT INTO STAFF VALUES (840,'SRINIVAS',50000,9086613457,'DELHI');

INSERT INTO STAFF VALUES (841,'JHON',45000,9879234511,'MADRAS');

INSERT INTO STAFF VALUES (842,'LAXMI',60000,9765534122,'HYD');

INSERT INTO CHEF VALUES (840,'MASTER');

INSERT INTO CHEF VALUES (841,'JUNIOR');

INSERT INTO CHEF VALUES (842,'GRAND MASTER');

insert into type values('soup');

insert into type values('starter');

insert into type values('biryani');

insert into type values('curry');

insert into type values('roti');

insert into recipies values(101,'Tomato Soup',80,'soup');

insert into recipies values(102,'Paneer Soup',85,'soup');

insert into recipies values(103,'chicken corn soup',100,'soup');

insert into recipies values(104,'Egg 65',120,'starter');

insert into recipies values(105,'Alu 65',120,'starter');

insert into recipies values(106,'Veg Spring rolls',160,'starter');

insert into recipies values(107,'Egg Nosile',120,'starter');

insert into recipies values(108,'veg cutlet',130,'starter');

insert into recipies values(109,'baby corn chilly',150,'starter');

insert into recipies values(110,'veg alewala',130,'starter');

insert into recipies values(111,'Chicken Biryani',260,'biryani');

insert into recipies values(112,'CHicken Biryani Fam',420,'biryani');

insert into recipies values(113,'Mutton Biryani',280,'biryani');

insert into recipies values(114,'Fish Biryani',240,'biryani');

insert into recipies values(115,'Prawn Biryani',300,'biryani');

insert into recipies values(116,'paneer butter masala',150,'curry');

insert into recipies values(117,'Dal punjabi',120,'curry');

insert into recipies values(118,'Veg sahi kurma',150,'curry');

insert into recipies values(119,'Mutton Curry',270,'curry');

insert into recipies values(120,'Fish Masala',240,'curry');

insert into recipies values(121,'Butter Chicken',220,'curry');

insert into recipies values(122,'Hyderabadi Chicken',220,'curry');

insert into recipies values(123,'Butter Naan',25,'roti');

insert into recipies values(124,'Tandori Roti',17,'roti');

insert into recipies values(125,'Rumal Roti',30,'roti');

insert into recipies values(126,'paneer paratha',240,'roti');

INSERT INTO PRODUCT\_NECCESSITY VALUES (1,'CHICKEN',100);

INSERT INTO PRODUCT\_NECCESSITY VALUES(2,'MUTTON',50);

INSERT INTO PRODUCT\_NECCESSITY VALUES(3,'FISH',80);

INSERT INTO PRODUCT\_NECCESSITY VALUES(4,'PRAWNS',60);

INSERT INTO PRODUCT\_NECCESSITY VALUES(5,'BASMATI RICE',500);

INSERT INTO PRODUCT\_NECCESSITY VALUES(6,'WHEAT FLOUR',300);

INSERT INTO PRODUCT\_NECCESSITY VALUES(7,'CORN FLOUR',150);

INSERT INTO PRODUCT\_NECCESSITY VALUES(8,'SEMOLINA',100);

INSERT INTO PRODUCT\_NECCESSITY VALUES(9,'ALL PORPOSE FLOUR',200);

INSERT INTO PRODUCT\_NECCESSITY VALUES(10,'BUTTER',150);

INSERT INTO PRODUCT\_NECCESSITY VALUES(11,'ONIONS',50);

INSERT INTO PRODUCT\_NECCESSITY VALUES(12,'PANNER',20);

INSERT INTO PRODUCT\_NECCESSITY VALUES(13,'SPECIAL MASALA',15);

INSERT INTO PRODUCT\_NECCESSITY VALUES(14,'GAS',2);

INSERT INTO PRODUCT\_NECCESSITY VALUES(15,'MAZAA',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(16,'SPRITE',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(17,'THUMSPUS',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(18,'FIZZ',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(19,'CAPSICUM',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(20,'CORRIANDER',20);

INSERT INTO PRODUCT\_NECCESSITY VALUES(21,'MINT',20);

INSERT INTO PRODUCT\_NECCESSITY VALUES(22,'CABBAGE',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(23,'TOMATOES',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(24,'CAULIFLOWER',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(25,'egg',500);

INSERT INTO PRODUCT\_NECCESSITY VALUES(26,'baby corn',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(27,'Chillies',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(28,'dal',5);

INSERT INTO PRODUCT\_NECCESSITY VALUES(29,'all0',5);

insert into supplier values(401,'sneha non veg','bhpl',30000,09.000);

insert into supplier values(402,'durge rice depo','bhpl',12000,10.00);

insert into supplier values(403,'lakshmi WS','warangal',40000,06.00);

insert into supplier values(404,'amul','hyd',36000,04.00);

insert into supplier values(405,'hp gas','bhpl',1800,08.00);

insert into supplier values(406,'raja beverages','bhpl',2400,08.00);

insert into supplier values(407,'maruthi vegetables','bhpl',16000,05.00);

insert into supplier values(408,'Aachi masala service','manchureal',2000,03.00);

insert into requirements values(101,23,1);

insert into requirements values(101,21,2);

insert into requirements values(101,7,3);

insert into requirements values(102,12,2);

insert into requirements values(102,21,2);

insert into requirements values(102,7,7);

insert into requirements values(103,7,3);

insert into requirements values(103,10,4);

insert into requirements values(103,21,1);

insert into requirements values(104,13,1);

insert into requirements values(104,9,3);

insert into requirements values(104,25,1);

insert into requirements values(105,29,3);

insert into requirements values(105,13,1);

insert into requirements values(106,6,1);

insert into requirements values(106,7,5);

insert into requirements values(106,19,6);

insert into requirements values(106,20,7);

insert into requirements values(106,21,4);

insert into requirements values(107,25,1);

insert into requirements values(107,13,1);

insert into requirements values(107,24,1);

insert into requirements values(108,9,6);

insert into requirements values(108,20,1);

insert into requirements values(108,21,1);

insert into requirements values(108,22,1);

insert into requirements values(108,23,6);

insert into requirements values(109,27,1);

insert into requirements values(109,28,1);

insert into requirements values(109,13,3);

insert into requirements values(110,20,1);

insert into requirements values(110,21,1);

insert into requirements values(110,22,8);

insert into requirements values(110,23,2);

insert into requirements values(111,1,1);

insert into requirements values(111,5,9);

insert into requirements values(111,13,1);

insert into requirements values(111,21,5);

insert into requirements values(112,1,2);

insert into requirements values(112,5,5);

insert into requirements values(112,13,1);

insert into requirements values(112,21,5);

insert into requirements values(113,2,6);

insert into requirements values(113,5,4);

insert into requirements values(113,13,3);

insert into requirements values(113,21,1);

insert into requirements values(114,3,1);

insert into requirements values(114,5,2);

insert into requirements values(114,13,1);

insert into requirements values(114,21,1);

insert into requirements values(115,4,3);

insert into requirements values(115,5,1);

insert into requirements values(115,13,1);

insert into requirements values(115,21,4);

insert into requirements values(116,10,1);

insert into requirements values(116,12,6);

insert into requirements values(116,13,1);

insert into requirements values(116,14,6);

insert into requirements values(117,28,1);

insert into requirements values(117,10,2);

insert into requirements values(117,23,1);

insert into requirements values(117,13,1);

insert into requirements values(118,10,2);

insert into requirements values(118,21,1);

insert into requirements values(118,22,1);

insert into requirements values(118,23,1);

insert into requirements values(119,2,1);

insert into requirements values(119,23,1);

insert into requirements values(119,10,3);

insert into requirements values(119,21,1);

insert into requirements values(120,3,3);

insert into requirements values(120,10,1);

insert into requirements values(120,13,1);

insert into requirements values(120,21,4);

insert into requirements values(121,10,2);

insert into requirements values(121,1,1);

insert into requirements values(121,214);

insert into requirements values(121,13,1);

insert into requirements values(122,1,1);

insert into requirements values(122,10,1);

insert into requirements values(122,13,1);

insert into requirements values(123,9,5);

insert into requirements values(123,6,6);

insert into requirements values(124,9,7);

insert into requirements values(124,6,4);

insert into requirements values(125,9,2);

insert into requirements values(126,12,1);

insert into requirements values(126,9,1);

insert into requirements values(126,6,1);

INSERT INTO WEIGHTER VALUES(835,10.00,16.00,0,0);

INSERT INTO WEIGHTER VALUES(836,10.00,16.00,0,0);

INSERT INTO WEIGHTER VALUES(837,16.00,22.00,0,0);

INSERT INTO WEIGHTER VALUES(838,16.00,22.00,0,0);

INSERT INTO WEIGHTER VALUES(839,16.00,22.00,0,0);

INSERT INTO OTHERS VALUES(831,10.00,16.00,'CLEANER');

INSERT INTO OTHERS VALUES(832,16.00,22.00,'CLEANER');

INSERT INTO OTHERS VALUES(833,10.00,18.00,'CUTTER');

INSERT INTO OTHERS VALUES(834,06.00,10.00,'SWEAPER');

insert into payment\_mode values ('phonepay');

insert into payment\_mode values ('gogglepay');

insert into payment\_mode values ('debit card');

insert into payment\_mode values ('credit card');

insert into payment\_mode values ('paytm');

insert into payment\_mode values ('paypal');

insert into payment\_mode values ('cash');

/

declare

i int := 201;

begin

loop

exit when i=221 ;

insert into tables values(i);

i := i+1;

end loop;

end ;

/

insert into occupy values('ramu',201);

insert into occupy values('raheem',202);

insert into occupy values('rajesh',203);

insert into occupy values('supriya',204);

insert into occupy values('suchiht',205);

insert into occupy values('suvaishanav',206);

insert into occupy values('surabhi',207);

insert into occupy values('anika',208);

insert into occupy values('avanthi',209);

insert into orders values('ramu',201,111,1);

insert into orders values('ramu',201,107,1);

insert into orders values('raheem',202,112,2);

insert into orders values('rajesh',203,116,1);

insert into orders values('rajesh',203,123,3);

insert into orders values('supriya',204,113,1);

insert into orders values('suchiht',205,103,1);

insert into orders values('suvaishanav',206,108,1);

insert into orders values('suvaishanav',206,113,1);

insert into orders values('suvaishanav',206,120,1);

insert into orders values('suvaishanav',206,123,4);

insert into orders values('surabhi',207,115,1);

insert into orders values('anika',208,114,1);

insert into orders values('avanthi',209,109,1);

insert into bills values ('phonepay',350,201,'ramu','02-05-2021',836,4.5);

insert into bills values ('cash',280,204,'supriya','02-05-2021',837,5);

insert into bills values ('paypal',100,205,'suchith','02-05-2021',838,4);

/

declare

i int := 101;

j int := 840;

begin

loop

exit when i=111 ;

insert into makes values(j,i);

i := i+1;

end loop;

end ;

/

declare

i int := 111;

j int := 841;

begin

loop

exit when i=116 ;

insert into makes values(j,i);

i := i+1;

end loop;

end ;

/

declare

i int := 116;

j int := 842;

begin

loop

exit when i=121 ;

insert into makes values(j,i);

i := i+1;

end loop;

end ;

/

declare

i int := 121;

j int := 841;

begin

loop

exit when i=123 ;

insert into makes values(j,i);

i := i+1;

end loop;

end ;

/

declare

i int := 123;

j int := 840;

begin

loop

exit when i=126;

insert into makes values(j,i);

i := i+1;

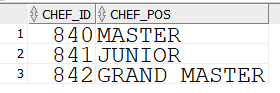
end loop;

end ;

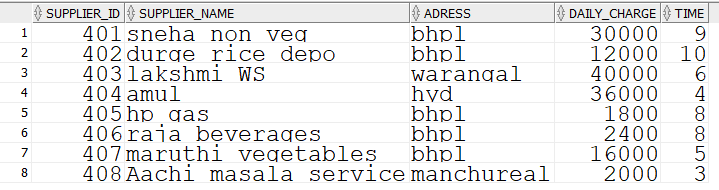
/

Tables

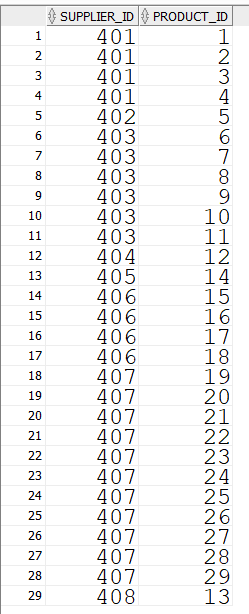
select \* from chef;



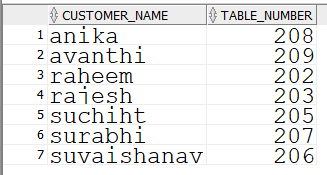
select \* from supplier;



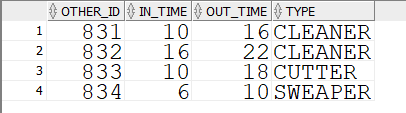
select \* from supplies;



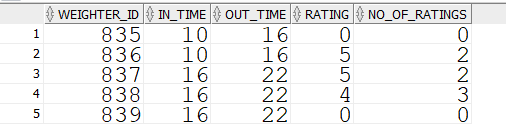
select \* from occupy;



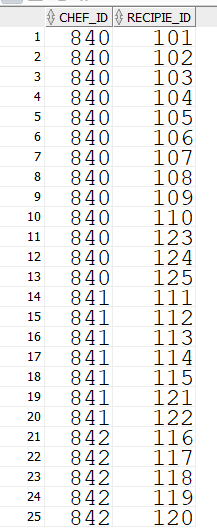
select \* from others;



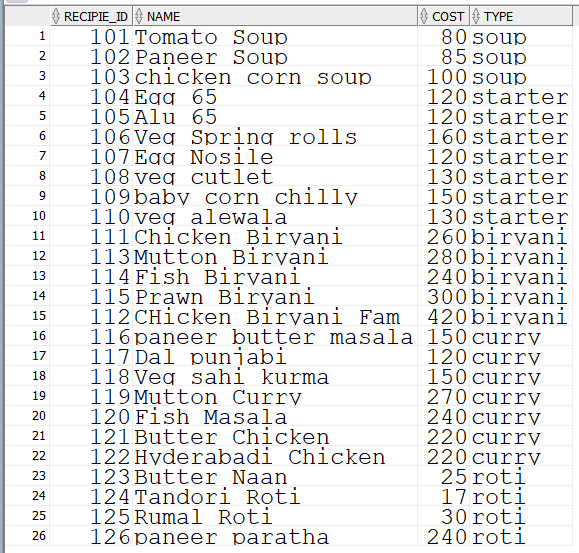
select \* from weighter;



select \* from makes;



select \* from recipies;



select \* from requirements;

RECIPIE\_ID,PRODUCT\_ID,QUANTITY

101,23,1

101,21,2

101,7,3

102,12,2

102,21,2

102,7,7

103,7,3

103,10,4

103,21,1

104,13,1

104,9,3

104,25,1

105,29,3

105,13,1

106,6,1

106,7,5

106,19,6

106,20,7

106,21,4

107,25,1

107,13,1

107,24,1

108,9,6

108,20,1

108,21,1

108,22,1

108,23,6

109,27,1

109,28,1

109,13,3

110,20,1

110,21,1

110,22,8

110,23,2

111,1,1

111,5,9

111,13,1

111,21,5

112,1,2

112,5,5

112,13,1

112,21,5

113,2,6

113,5,4

113,13,3

113,21,1

114,3,1

114,5,2

114,13,1

114,21,1

115,4,3

115,5,1

115,13,1

115,21,4

116,10,1

116,12,6

116,13,1

116,14,6

117,28,1

117,10,2

117,23,1

117,13,1

118,10,2

118,21,1

118,22,1

118,23,1

119,2,1

119,23,1

119,10,3

119,21,1

120,3,3

120,10,1

120,13,1

120,21,4

121,10,2

121,1,1

121,13,1

122,1,1

122,10,1

122,13,1

123,9,5

123,6,6

124,9,7

124,6,4

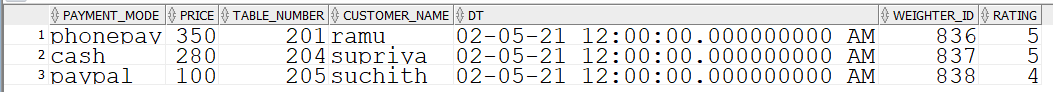
125,9,2

126,12,1

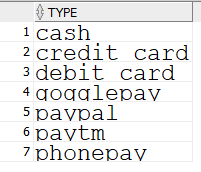
126,9,1

126,6,1

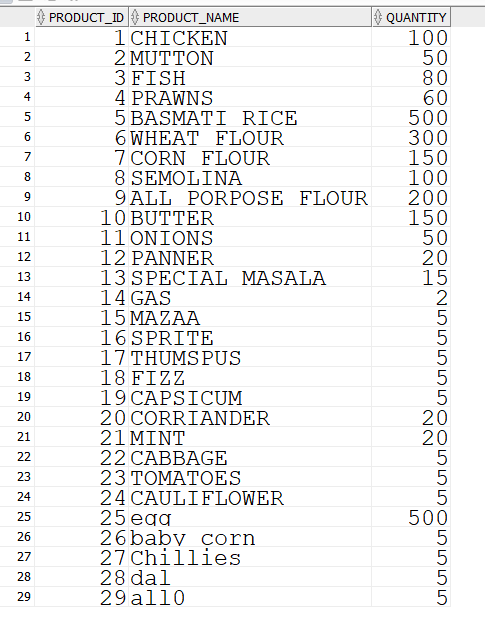
select \* from bills;



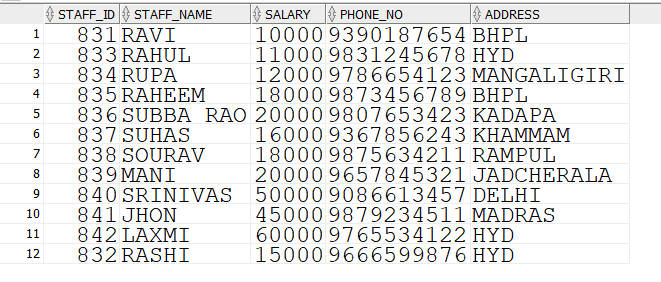
select \* from payment\_mode;



select \* from product\_neccessity;



select \* from staff;



FINAL OVERVIEW ON PROJECT