Grocery Sales Management System

Final Lab Project
Submitted by

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ABSTRUCT

We're now living in 21st century. It's important to buy and sell things in this generation of industrial revolution. This can help us in developing our thinking skill as well as managing skill. For this particular independency we can get idea from management of a store or shop. And for that the Grocery Shop will be the great one, where we can find out various types of our everyday required things. In this project, our actual goal is to make such kind of management system which can resolve this whole critical system into an easiest one by designing it into some small systems.

INTRODUCTION

As our abstract defined us that, our main goal is to make the whole database system into some sort of sub-system which are defined as the attributes of the entities in the database. The main advantage relies on the division of entities into the attributes and if they are interconnected with relationships. So for implementing this we've created some of the entities which are 'EMPLOYEES', 'CUSTOMER', 'SALES', 'PRODUCT' and 'PAYMENT'. These entities can contain two types of keys, which are the primary key and the foreign key. In this project, our 'EMPLOYEES' will manage the customers and products. 'EMPLOYEES' will sell products to customer by creating relation 'SALES' with the 'CUSTOMER'. Customer will purchase product and will complete payment by creating relation 'Purchase' with 'PRODUCT and 'Pays' with 'PAYMENT. By the way, we can accomplish our working cycle.

ENTITY RELATIONSHIP DIAGRAM

Entity relationship model is used to represent the conceptual schema of the database. The important method of entity relationship model is entity relationship model in which set of entities are represented by relation in a graphical form.

E-R diagram for Grocery Sales Management System:

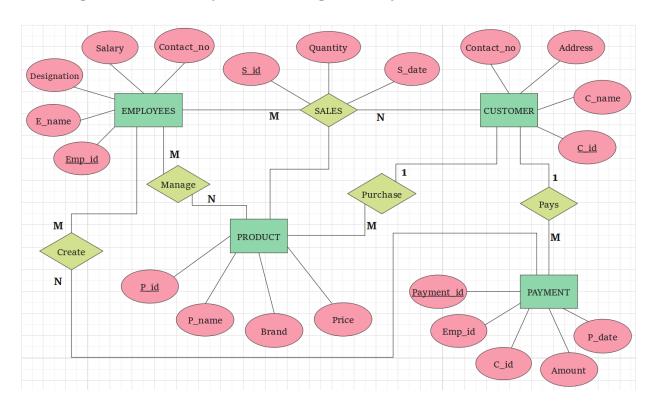


Figure: E-R diagram for Grocery Sales Management System.

DATABASE SCHEMA

When we talk about database, we must differentiate between the database schema, which is the logical design of the database, and the database instance, which is a snapshot of the data in the database at a given instant time.

Database schema for Grocery Sales Management System:

EMPLOYEES

(Emp_id, E_name, Designation, Salaray, Contact_no)

CUSTOMER

(<u>C_id</u>, C_name, Address, Contact_no)

PRODUCT

(P_id, P_name, Brand, Price)

SALES

(S_id, Emp_id, C_id, P_id, Quantity, S_date)

PAYMENT

 $(\ \underline{Payment_id}, Emp_id, C_id, Amount, P_date\)$

DDL STATEMENTS AND TABLES

EMPLOYEES

DDL Statement:

```
CREATE TABLE "EMPLOYEES"
  ( "EMP_ID" NUMBER(8,0) NOT NULL ENABLE,
    "E_NAME" VARCHAR2(50),
    "DESIGNATION" VARCHAR2(50),
    "SALARY" NUMBER(8,0),
    "CONTACT_NO" VARCHAR2(50),
    CONSTRAINT "EMPLOYEES_PK" PRIMARY KEY
    ("EMP_ID") ENABLE
  )
```

EDIT	EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
	104	Adib Rahman	Salesman	8000	01865742231
	106	Hasan Ahmed	Salesman	9000	01867593471
	108	Sania Islam	Salesman	8000	01675329113
	110	Nazifa Jahan	Salesman	8000	01876515113
	109	Zannat Ara	Salesman	9500	01896636113
	103	Rahim Ali	Salesman	7000	01755473819
	102	Sanjida Aziz	Cashier	30000	01462377321
	105	Zakir Hossain	Salesman	8500	01967834581
	101	Karim Mahmud	Cashier	30000	01756432891
R	107	Sumaiya Akter	Salesman	9000	01562378121
				row(s) 1	- 10 of 10

CUSTOMER

DDL Statement:

```
CREATE TABLE "CUSTOMER"
  ( "C_ID" NUMBER(8,0) NOT NULL ENABLE,
    "C_NAME" VARCHAR2(50),
    "ADDRESS" VARCHAR2(50),
    "CONTACT_NO" VARCHAR2(50),
    CONSTRAINT "CUSTOMER_PK" PRIMARY KEY
    ("C_ID") ENABLE
)
```

EDIT	C_ID	C_NAME	ADDRESS	CONTACT_NO
	3	Saida Oyshee	SSK Road, Feni	01988923144
	7	Rownak Rimjim	SSK Road, Feni	01932818812
	10	Anika Aziz	Nazir Road, Feni	01983732111
	1	Radia Ahmed	Rampur, Feni	01738432812
	2	Atifa Mahmud	Doctor Para, Feni	01923743121
	6	Promeety Borna	Master Para, Feni	01655348918
	9	Tanjina Pritty	Trunk Road, Feni	01823617126
	4	Muna Alam	Mizan Road, Feni	01723471725
	5	Tasfia Nishat	Mizan Road, Feni	01923723123
	8	Faiza Kaynat	Ukil Para, Feni	01567113319
	row(s) 1 - 10 of 10			

PRODUCT

DDL Statement:

```
CREATE TABLE "PRODUCT"
  ( "P_ID" NUMBER(8,0) NOT NULL ENABLE,
    "P_NAME" VARCHAR2(50),
    "BRAND" VARCHAR2(50),
    "PRICE" NUMBER(8,0),
    CONSTRAINT "PRODUCT_PK" PRIMARY KEY
    ("P_ID") ENABLE
)
```

EDIT	P_ID	P_NAME	BRAND	PRICE		
	1001	Soybin Oil	Rupchanda	170		
	1002	Milk	Aarong Dairy	140		
	1003	Noodles	Maggie	300		
	1007	Flour	Fresh	100		
	1008	Sugar	Fresh	120		
	1004	Mustard Oil	Radhuni	80		
	1005	Salt	Fresh	50		
	1006	Tea	Taaza	188		
	1009	Biscuit	Parle	70		
	1010	Soap	Lifeboy	90		
		row(s) 1 - 10 of 10				

SALES

DDL Statement:

```
CREATE TABLE "SALES"

( "S_ID" NUMBER(8,0) NOT NULL ENABLE,

"EMP_ID" NUMBER(8,0) NOT NULL ENABLE,

"C_ID" NUMBER(8,0) NOT NULL ENABLE,

"P_ID" NUMBER(8,0) NOT NULL ENABLE,

"QUANTITY" NUMBER(8,0),

"S_DATE" DATE,

CONSTRAINT "SALES_PK" PRIMARY KEY

("S_ID") ENABLE,

CONSTRAINT "SALES_FK" FOREIGN KEY ("EMP_ID")

REFERENCES "EMPLOYEES" ("EMP_ID") ENABLE,

CONSTRAINT "SALES_FK2" FOREIGN KEY ("C_ID")

REFERENCES "CUSTOMER" ("C_ID") ENABLE,

CONSTRAINT "SALES_FK3" FOREIGN KEY ("P_ID")

REFERENCES "PRODUCT" ("P_ID") ENABLE
```

EDIT	S_ID	EMP_ID	C_ID	P_ID	QUANTITY	S_DATE
	504	106	1	1010	5	30-MAR-22
	505	110	8	1003	1	05-FEB-22
	506	103	10	1006	4	03-JAN-22
	510	105	7	1002	2	09-JAN-22
	511	103	4	1001	1	03-FEB-22
	512	105	7	1007	2	25-MAR-22
	502	107	5	1005	2	05-APR-22
	503	107	9	1008	1	09-JAN-22
	501	109	3	1003	2	22-MAR-22
	507	107	2	1002	2	08-MAR-22
	508	104	4	1010	10	04-FEB-22
	509	108	6	1006	3	12-MAY-22
row(s) 1 - 12 of 12					12	

PAYMENT

DDL Statement:

```
CREATE TABLE "PAYMENT"

( "PAYMENT_ID" NUMBER(8,0) NOT NULL ENABLE,

"EMP_ID" NUMBER(8,0) NOT NULL ENABLE,

"C_ID" NUMBER(8,0) NOT NULL ENABLE,

"AMOUNT" NUMBER(8,0),

"P_DATE" DATE,

CONSTRAINT "PAYMENT_PK" PRIMARY KEY

("PAYMENT_ID") ENABLE,

CONSTRAINT "PAYMENT_FK" FOREIGN KEY ("EMP_ID")

REFERENCES "EMPLOYEES" ("EMP_ID") ENABLE,

CONSTRAINT "PAYMENT_FK2" FOREIGN KEY ("C_ID")

REFERENCES "CUSTOMER" ("C_ID") ENABLE
```

EDIT	PAYMENT_ID	EMP_ID	C_ID	AMOUNT	P_DATE
	1102	102	7	480	25-MAR-22
	1104	107	2	280	08-MAR-22
	1106	107	5	100	05-APR-22
	1107	108	6	564	12-MAY-22
	1108	110	8	300	05-FEB-22
	1109	107	9	120	09-JAN-22
	1110	103	10	752	03-JAN-22
	1101	101	4	1070	04-FEB-22
	1103	106	1	450	30-MAR-22
	1105	109	3	600	22-MAR-22
	row(s) 1 - 10 of 10				

SEARCHING DATA FROM INDIVIDUAL TABLE

1. Find the information of employee whose ID is '106'.

Solution:

```
SELECT*
FROM EMPLOYEES
WHERE EMP ID = '106';
```

EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
106	Hasan Ahmed	Salesman	9000	01867593471

¹ rows returned in 0.02 seconds CSV Export

2. Find the details of employee 'Sanjida Aziz'.

Solution:

SELECT* FROM EMPLOYEES WHERE E NAME = 'Sanjida Aziz';

EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
102	Sanjida Aziz	Cashier	30000	01462377321

3. Find average salary from EMPLOYEES.

Solution:

SELECT AVG (SALARY) FROM EMPLOYEES;

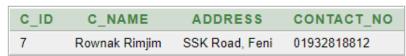
AVG(SALARY) 12700

1 rows returned in 0.00 seconds

4. Find the information of customer whose ID is '7'.

Solution:

SELECT* FROM CUSTOMER WHERE $C_{ID} = '7'$;



5. Find the customers who live in 'Mizan Road, Feni'.

Solution:

SELECT*

FROM CUSTOMER

WHERE ADDRESS ='Mizan Road, Feni';

C_ID	C_NAME	ADDRESS	CONTACT_NO
4	Muna Alam	Mizan Road, Feni	01723471725
5	Tasfia Nishat	Mizan Road, Feni	01923723123

2 rows returned in 0.00 seconds

CSV Export

6. Show the price of products in ascending order.

Solution:

SELECT P_ID, PRICE
FROM PRODUCT
ORDER BY PRICE ASC;

P_ID	PRICE
1005	50
1009	70
1004	80
1010	90
1007	100
1008	120
1002	140
1001	170
1006	188
1003	300

10 rows returned in 0.00 seconds

7. Find the details of product 'Milk'.

Solution:

SELECT*

FROM PRODUCT

WHERE P_NAME ='Milk';

P_ID	P_NAME	BRAND	PRICE
1002	Milk	Aarong Dairy	140

1 rows returned in 0.00 seconds CSV Export

8. Find the products of brand 'Fresh'.

Solution:

SELECT*

FROM PRODUCT

WHERE BRAND = 'Fresh';

P_ID	P_NAME	BRAND	PRICE
1007	Flour	Fresh	100
1008	Sugar	Fresh	120
1005	Salt	Fresh	50

9. Show the details of sales ID '506'.

Solution:

SELECT* FROM SALES **WHERE** S_ID = '506';

S_ID	EMP_ID	C_ID	P_ID	QUANTITY	S_DATE
506	103	10	1006	4	03-JAN-22

1 rows returned in 0.00 seconds CSV Export

10. Find the payment details of customer ID '4'.

Solution:

SELECT* FROM PAYMENT **WHERE** C_ID = '4';

PAYMENT_ID	EMP_ID	C_ID	AMOUNT	P_DATE
1101	101	4	1070	04-FEB-22

SEARCHING DATA FROM MULTIPLE TABLES

1. Display the list of employees who sale products and also show the product ID.

Solution:

SELECT EMP_ID, E_NAME
FROM EMPLOYEES JOIN SALES
USING(EMP_ID);

EMP_ID	E_NAME	P_ID
106	Hasan Ahmed	1010
110	Nazifa Jahan	1003
103	Rahim Ali	1006
105	Zakir Hossain	1002
103	Rahim Ali	1001
105	Zakir Hossain	1007
107	Sumaiya Akter	1005
107	Sumaiya Akter	1008
109	Zannat Ara	1003
107	Sumaiya Akter	1002
104	Adib Rahman	1010
108	Sania Islam	1006

12 rows returned in 0.00 seconds

2. Show the purchase details of the customer named 'Radia Ahmed'.

Solution:

SELECT C NAME, P ID, QUANTITY, S DATE FROM SALES NATURAL JOIN CUSTOMER WHERE C NAME= 'Radia Ahmed';

C_NAME	P_ID	QUANTITY	S_DATE
Radia Ahmed	1010	5	30-MAR-22

1 rows returned in 0.00 seconds CSV Export

3. Display the all information of SALES and PAYMENT table.

Solution:

SELECT*

FROM SALES S LEFT JOIN PAYMENT P ON S.C ID=P.C ID;

512 105 7 1007 2 25-MAR-22 1102 102 7 480 25-MAR 510 105 7 1002 2 09-JAN-22 1102 102 7 480 25-MAR 507 107 2 1002 2 08-MAR-22 1104 107 2 280 08-MAR 502 107 5 1005 2 05-APR-22 1106 107 5 100 05-APR 509 108 6 1006 3 12-MAY-22 1107 108 6 564 12-MAY 505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN											
510 105 7 1002 2 09-JAN-22 1102 102 7 480 25-MAR 507 107 2 1002 2 08-MAR-22 1104 107 2 280 08-MAR 502 107 5 1005 2 05-APR-22 1106 107 5 100 05-APR 509 108 6 1006 3 12-MAY-22 1107 108 6 564 12-MAY 505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB	S_ID	EMP_ID	C_ID	P_ID	QUANTITY	S_DATE	PAYMENT_ID	EMP_ID	C_ID	AMOUNT	P_DATE
507 107 2 1002 2 08-MAR-22 1104 107 2 280 08-MAR 502 107 5 1005 2 05-APR-22 1106 107 5 100 05-APR 509 108 6 1006 3 12-MAY-22 1107 108 6 564 12-MAY 505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB	512	105	7	1007	2	25-MAR-22	1102	102	7	480	25-MAR-22
502 107 5 1005 2 05-APR-22 1106 107 5 100 05-APR 509 108 6 1006 3 12-MAY-22 1107 108 6 564 12-MAY 505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	510	105	7	1002	2	09-JAN-22	1102	102	7	480	25-MAR-22
509 108 6 1006 3 12-MAY-22 1107 108 6 564 12-MAY-25 505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB-50 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN-25 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN-50 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB-51 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB-50 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR-50	507	107	2	1002	2	08-MAR-22	1104	107	2	280	08-MAR-22
505 110 8 1003 1 05-FEB-22 1108 110 8 300 05-FEB 503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	502	107	5	1005	2	05-APR-22	1106	107	5	100	05-APR-22
503 107 9 1008 1 09-JAN-22 1109 107 9 120 09-JAN 506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	509	108	6	1006	3	12-MAY-22	1107	108	6	564	12-MAY-22
506 103 10 1006 4 03-JAN-22 1110 103 10 752 03-JAN 508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	505	110	8	1003	1	05-FEB-22	1108	110	8	300	05-FEB-22
508 104 4 1010 10 04-FEB-22 1101 101 4 1070 04-FEB 511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	503	107	9	1008	1	09-JAN-22	1109	107	9	120	09-JAN-22
511 103 4 1001 1 03-FEB-22 1101 101 4 1070 04-FEB 504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	506	103	10	1006	4	03-JAN-22	1110	103	10	752	03-JAN-22
504 106 1 1010 5 30-MAR-22 1103 106 1 450 30-MAR	508	104	4	1010	10	04-FEB-22	1101	101	4	1070	04-FEB-22
	511	103	4	1001	1	03-FEB-22	1101	101	4	1070	04-FEB-22
501 109 3 1003 2 22-MAR-22 1105 109 3 600 22-MAR	504	106	1	1010	5	30-MAR-22	1103	106	1	450	30-MAR-22
	501	109	3	1003	2	22-MAR-22	1105	109	3	600	22-MAR-22

12 rows returned in 0.00 seconds

4. Show the list of customers ID who had purchased products and also show the name, brand and price of those products.

Solution:

SELECT C_ID, P_NAME, BRAND, PRICE
FROM SALES S INNER JOIN PRODUCT P
ON S.P ID=P.P ID;

C_ID	P_NAME	BRAND	PRICE
1	Soap	Lifeboy	90
8	Noodles	Maggie	300
10	Tea	Taaza	188
7	Milk	Aarong Dairy	140
4	Soybin Oil	Rupchanda	170
7	Flour	Fresh	100
5	Salt	Fresh	50
9	Sugar	Fresh	120
3	Noodles	Maggie	300
2	Milk	Aarong Dairy	140
4	Soap	Lifeboy	90
6	Tea	Taaza	188

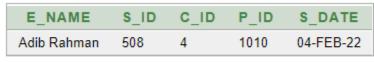
12 rows returned in 0.00 seconds

CSV Export

5. Show the sales details of employee named 'Adib Rahman'.

Solution:

SELECT E_NAME, C_ID, P_ID, S_DATE
FROM SALES NATURAL JOIN EMPLOYEES
WHERE E_NAME= 'Adib Rahman';



1 rows returned in 0.00 seconds

CSV Export

SUB – QUERIES

1. Find the employees who earn same salary as employee '110'.

Solution:

SELECT EMP ID, E NAME, SALARY FROM EMPLOYEES WHERE SALARY=(SELECT SALARY FROM EMPLOYEES WHERE EMP ID='110');

EMP_ID	E_NAME	SALARY
104	Adib Rahman	8000
108	Sania Islam	8000
110	Nazifa Jahan	8000

3 rows returned in 0.00 seconds

2. Find the information of employee who is getting lowest salary.

Solution:

SELECT* FROM EMPLOYEES WHERE SALARY = (SELECT MIN (SALARY) FROM EMPLOYEES);

EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
103	Rahim Ali	Salesman	7000	01755473819

3. Find the name and price of 'Radhuni' brand's product.

Solution:

P_NAME	BRAND	PRICE
Mustard Oil	Radhuni	80

1 rows returned in 0.00 seconds

4. Find the products which price is more than 100.

Solution:

P_NAME	PRICE
Soybin Oil	170
Milk	140
Noodles	300
Sugar	120
Tea	188

5 rows returned in 0.00 seconds

5. Find the products which price is less than 100.

Solution:

SELECT P_NAME, PRICE FROM PRODUCT WHERE PRICE < (SELECT PRICE FROM PRODUCT WHERE PRICE='100');

P_NAME	PRICE
Mustard Oil	80
Salt	50
Biscuit	70
Soap	90

⁴ rows returned in 0.00 seconds

6. Find the information of employees who is getting 30000 salary.

Solution:

SELECT*

FROM EMPLOYEES

WHERE SALARY IN (SELECT SALARY

FROM EMPLOYEES

WHERE SALARY='30000');

EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
101	Karim Mahmud	Cashier	30000	01756432891
102	Sanjida Aziz	Cashier	30000	01462377321

7. Find the employees who earn salary less than 9000.

Solution:

SELECT*

FROM EMPLOYEES

WHERE SALARY IN (SELECT SALARY

FROM EMPLOYEES

WHERE SALARY<'9000');

EMP_ID	E_NAME	DESIGNATION	SALARY	CONTACT_NO
110	Nazifa Jahan	Salesman	8000	01876515113
108	Sania Islam	Salesman	8000	01675329113
104	Adib Rahman	Salesman	8000	01865742231
103	Rahim Ali	Salesman	7000	01755473819
105	Zakir Hossain	Salesman	8500	01967834581

5 rows returned in 0.00 seconds CSV Export

8. Find the unique salary of all employees.

Solution:

SELECT DISTINCT SALARY

FROM EMPLOYEES;

SALARY
9000
9500
10000
30000
8000
7000

6 rows returned in 0.00 seconds

9. Find the product which is lowest price.

Solution:

SELECT*

FROM PRODUCT

WHERE PRICE = (SELECT MIN (PRICE)

FROM PRODUCT);

P_ID	P_NAME	BRAND	PRICE
1005	Salt	Fresh	50

1 rows returned in 0.00 seconds CSV Export

10. Find the customers who are from SSK Road, Feni.

Solution:

SELECT*

FROM CUSTOMER

WHERE ADDRESS IN (SELECT ADDRESS

FROM CUSTOMER

WHERE ADDRESS='SSK Road, Feni');

C_ID	C_NAME	ADDRESS	CONTACT_NO
7	Rownak Rimjim	SSK Road, Feni	01932818812
3	Saida Oyshee	SSK Road, Feni	01988923144

PL/SQL

1. Display the all information of employee ID '101'.

Solution:

```
DECLARE
 emp id number (8,0);
 ename employees.e name%type;
 designation employees.designation%type;
 salary employees.salary%type;
 contact employees.contact no%type;
BEGIN
 select emp id, e name, designation, salary,
 contact no INTO emp id, ename, designation,
 salary, contact
 from employees
 where emp id='101';
dbms output.put line('All information of employee
ID 101 is: ');
dbms_output.put_line('ID : '|| emp_id);
dbms output.put line('NAME : '|| ename);
dbms output.put line('DESIGNATION : '||
designation);
dbms output.put line('SALARY : '|| salary);
dbms output.put line('CONTACT : '|| contact);
END;
All information of employee ID 101 is:
ID: 101
NAME : Karim Mahmud
DESIGNATION : Cashier
SALARY : 30000
CONTACT : 01756432891
Statement processed.
```

2. Show the details of the product 'Noodles'.

Solution:

```
DECLARE
 p id product.p id%type;
 pname varchar2(50);
 brand product.brand%type;
price product.price%type;
BEGIN
 select p id, p name, brand, price INTO
 p id, pname, brand, price
 from product
 where p name='Noodles';
dbms output.put line('Details of the product
Noodles are: ');
dbms output.put line('ID : '|| p id);
dbms output.put line('PRODUCT NAME : '|| pname);
dbms output.put line('BRAND : '|| brand);
dbms output.put line('PRICE : '|| price);
END;
Details of the product Noodles are:
ID : 1003
PRODUCT NAME : Noodles
BRAND : Maggie
PRICE: 300
Statement processed.
```

3. Find the product and show the details which price is more than 100.

Solution:

```
CREATE OR REPLACE procedure maxprice(a IN number,
b IN varchar2,c IN varchar2,d IN number)
as
BEGIN
IF a>100 THEN
dbms_output.put_line(' ');
dbms_output.put_line(' 'P_ID: '||d||' || PRODUCT
NAME: '||c||' || BRAND: '||b||' || PRICE: '||a);
END IF;
END;
```

Procedure created.

DECLARE

```
a number;
b varchar2(20);
c varchar2(25);
d number;
p_record PRODUCT%rowtype;
cursor p IS
SELECT*
FROM PRODUCT;
BEGIN
OPEN p;
dbms_output.put_line('Details of the product which price is more than 100:');
LOOP
FETCH p INTO p record;
```

```
EXIT WHEN p%notfound;
   a:= p record.PRICE;
   b:= p record.BRAND;
   c:= p record.P NAME;
   d:= p record.P ID;
   maxprice(a,b,c,d);
   END LOOP;
   CLOSE p;
END;
Details of the product which price is more than 100:
P_ID: 1001 | PRODUCT NAME: Soybin Oil | BRAND: Rupchanda | PRICE: 170
P_ID: 1002 | PRODUCT NAME: Milk | BRAND: Aarong Dairy | PRICE: 140
P_ID: 1003 | PRODUCT NAME: Noodles | BRAND: Maggie | PRICE: 300
P ID: 1008 | PRODUCT NAME: Sugar | BRAND: Fresh | PRICE: 120
P_ID: 1006 | PRODUCT NAME: Tea | BRAND: Taaza | PRICE: 188
Statement processed.
```

4. Show name and address of all customer.

Solution:

```
DECLARE
 c record customer %rowtype;
 cursor c IS
   SELECT*
   FROM customer;
BEGIN
OPEN C;
    dbms output.put line('Name and Address of all
    customer: ');
    LOOP
    FETCH c INTO c record;
    EXIT WHEN conotfound;
dbms output.put_line(' NAME : '|| c_record.c_name
||' || ADDRESS : '||c record.address);
END LOOP;
CLOSE C;
END;
Name and Address of all customer:
 NAME : Saida Oyshee | | ADDRESS : SSK Road, Feni
 NAME : Rownak Rimjim || ADDRESS : SSK Road, Feni
 NAME : Anika Aziz | ADDRESS : Nazir Road, Feni
 NAME : Radia Ahmed | ADDRESS : Rampur, Feni
 NAME : Atifa Mahmud | ADDRESS : Doctor Para, Feni
 NAME : Promeety Borna | ADDRESS : Master Para, Feni
 NAME : Tanjina Pritty | ADDRESS : Trunk Road, Feni
 NAME : Muna Alam | | ADDRESS : Mizan Road, Feni
 NAME : Tasfia Nishat | ADDRESS : Mizan Road, Feni
 NAME : Faiza Kaynat | ADDRESS : Ukil Para, Feni
Statement processed.
```

5. Display the list of the customers who purchased product more than amount 500.

Solution:

```
CREATE OR REPLACE procedure maxamount (a IN number,
b IN number)
as
BEGIN
IF b>500 THEN
dbms output.put line(' ');
dbms output.put line('C ID: '||a||' || AMOUNT:
'||b);
 END IF;
END;
Procedure created.
DECLARE
   a number;
   b number;
   p record PAYMENT%rowtype;
cursor p IS
 SELECT*
 FROM PAYMENT;
BEGIN
 OPEN p;
   dbms output.put line('List of the customers who
   purchased product more than amount 500:');
   LOOP
   FETCH p INTO p record;
   EXIT WHEN p%notfound;
```

```
a:= p_record.C_ID;
b:= p_record.AMOUNT;
maxamount(a,b);
END LOOP;
CLOSE p;
END;

List of the customers who purchased product more than amount 500:
C_ID: 6 || AMOUNT: 564

C_ID: 10 || AMOUNT: 752

C_ID: 4 || AMOUNT: 1070

C_ID: 3 || AMOUNT: 600

Statement processed.
```