SQL CODE IMPLEMENTATION:

CREATE TABLE:

```
SQL> create table brands(
 2 bid number(5),
 3 bname varchar(20)
 4);
Table created.
SQL> alter table brands
 2 add primary
key(bid); Table altered.
SQL> create table inv_user(
 2 user_id varchar(20),
     name varchar(20),
    password varchar(20),
     last_login timestamp,
 5
     user_type varchar(10)
     );
Table created.
SQL> create table categories(
 2 cid number(5),
 3 category_name varchar(20)
 4);
Table created.
SQL> alter table categories
 2 add primary
key(cid); Table altered.
SQL> alter table inv_user
 2 add primary key(user_id);
```

Table altered.

```
SQL> create table product(
 2 pid number(5) primary key,
 3 cid number(5) references categories(cid),
 4 bid number(5) references brands(bid),
 5 sid number(5),
 6 pname varchar(20),
 7 p_stock number(5),
 8 price number(5),
 9 added_date date);
Table created.
SQL> create table stores(
 2 sid number(5),
 3 sname varchar(20),
 4 address varchar(20),
 5 mobno number(10)
 6);
Table created.
SQL> alter table stores
 2 add primary key(sid);
Table altered.
SQL> alter table product
 2 add foreign key(sid)references stores(sid);
Table altered.
SQL> create table provides(
 2 bid number(5)references brands(bid),
 3 sid number(5)references stores(sid),
 4 discount number(5));
Table created.
SQL> create table customer_cart(
 2 cust_id number(5) primary key,
 3 name varchar(20),
 4 mobno number(10)
 5);
```

```
Table created.
```

```
SQL> create table select_product(
 2 cust_id number(5) references customer_cart(cust_id),
 3 pid number(5)references product(pid),
 4 quantity number(4)
 5);
Table created.
SQL> create table transaction(
 2 id number(5) primary key,
 3 total_amount number(5),
 4 paid number(5),
 5 due number(5),
 6 gst number(3),
 7 discount number(5),
 8 payment_method varchar(10),
 9 cart_id number(5) references customer_cart(cust_id)
10);
Table created.
SQL> create table invoice(
 2 item no number(5),
 3 product_name varchar(20),
 4 quantity number(5),
 5 net_price number(5),
 6 transaction_id number(5)references transaction(id)
 7);
INSERTION:
INSERT INTO BRANDS:
SQL> insert into brands values(
 2 '&bid'
 3,
 4 '&bname');
Enter value for bid: 1
old 2: '&bid'
new 2: '1'
Enter value for bname: Apple
old 4: '&bname')
```

```
new 4: 'Apple')
1 row created.
1 row created.
SQL> insert into brands values(2,'Samsung');
1 row created.
SQL> insert into brands values(3,'Nike');
1 row created.
SQL> insert into brands values(4,'Fortune');
1 row created.
INSERT INTO INV_USER:
SQL> insert into inv_user values(
 2 '&user_id',
 3 '&name',
 4 '&password',
 5 '&last_login',
 6 '&user_type');
Enter value for user_id: vidit@gmail.com
old 2: '&user_id',
new 2: 'vidit@gmail.com',
Enter value for name: vidit
old 3: '&name',
new 3: 'vidit',
Enter value for password: 1234
old 4: '&password',
new 4: '1234',
Enter value for last_login: 31-oct-18 12:40
old 5: '&last login',
new 5: '31-oct-18 12:40',
Enter value for user_type: admin
old 6: '&user_type')
new 6: 'admin')
1 row created.
SQL> insert into inv_user values('harsh@gmail.com','Harsh Khanelwal','1111','30-oct-
18 10:20', 'Manager');
```

1 row created.

SQL> insert into inv_user values('prashant@gmail.com','Prashant','0011','29-oct-18 10:20','Accountant');

1 row created.

INSERT INTO CATEGORIES:

SQL> insert into categories values(

- 2 '&cid',
- 3 '&category_name');

Enter value for cid: 1

old 2: '&cid',

new 2: '1',

Enter value for category_name: Electroincs

old 3: '&category_name')

new 3: 'Electroincs')

1 row created.

SQL> insert into categories values(2,'Clothing');

1 row created.

SQL> insert into categories values(3,'Grocey');

1 row created.

INSERT INTO STORE

SQL> insert into stores values(

- 2 '&sid',
- 3 '&sname',
- 4 '&address',
- 5 '&mobno');

Enter value for sid:

1 old 2: '&sid',

new 2: '1',

Enter value for sname: Ram kumar

old 3: '&sname',

new 3: 'Ram kumar',

Enter value for address: Katpadi vellore

old 4: '&address',

new 4: 'Katpadi vellore',

Enter value for mobno: 9999999999

old 5: '&mobno')

```
new 5: '999999999')

1 row created.

SQL> insert into stores values(2,'Rakesh kumar','chennai',8888555541);

1 row created.

SQL> insert into stores values(3,'Suraj','Haryana',7777555541);

1 row created.

INSERT INTO PRODUCT:

SQL> insert into product values(
2 '&pid',
3 '&cid',
4 '&bid',
5 '&sid',
```

6 '&pname', 7 '&p_stock', 8 '&price',

old 2: '&pid', new 2: '1',

old 3: '&cid', new 3: '1',

old 4: '&bid', new 4: '1',

old 5: '&sid', new 5: '1',

old 6: '&pname', new 6: 'IPHONE',

old 7: '&p_stock',

old 8: '&price', new 8: '45000',

old 9: '&added_date')

new 7: '4',

9 '&added_date'); Enter value for pid: 1

Enter value for cid: 1

Enter value for bid: 1

Enter value for sid: 1

Enter value for pname: IPHONE

Enter value for p_stock: 4

Enter value for price: 45000

Enter value for added_date: 31-oct-18

```
new 9: '31-oct-18')
1 row created.
SQL> insert into product values(2,1,1,1,'Airpods',3,19000,'27-oct-
18'); 1 row created.
SQL> insert into product values(3,1,1,1,'Smart Watch',3,19000,'27-oct-18');
1 row created.
SQL> insert into product values(4,2,3,2,'Air Max',6,7000,'27-oct-18');
1 row created.
SQL> insert into product values(5,3,4,3,'REFINED OIL',6,750,'25-oct-18');
1 row created.
INSERT INTO PROVIDES:
SQL> insert into provides values(1,1,12);
1 row created.
SQL> insert into provides values(2,2,7);
1 row created.
SQL> insert into provides values(3,3,15);
1 row created.
SQL> insert into provides values(1,2,7);
1 row created.
SQL> insert into provides values(4,2,19);
1 row created.
SQL> insert into provides values(4,3,20);
1 row created.
```

INSERT INTO CUSTOMER_CART:

```
SQL> insert into customer_cart values(
 2 '&cust_id',
 3 '&name',
4 '&mobno');
Enter value for cust_id: 1
old 2: '&cust_id',
new 2: '1',
Enter value for name: Ram
old 3: '&name',
new 3: 'Ram',
Enter value for mobno: 9876543210
old 4: '&mobno')
new 4: '9876543210')
1 row created.
SQL> insert into customer_cart values(2,'Shyam',777777777);
1 row created.
SQL> insert into customer_cart values(3,'Mohan',7777777775);
1 row created.
INSERT INTO SELECT_PRODUCT:
SQL> insert into select_product values(
 2 '&cust_id',
 3 '&pid',
 4 '&quantity');
Enter value for cust_id: 1
old 2: '&cust_id',
new 2: '1',
Enter value for pid: 2
old 3: '&pid',
new 3: '2',
Enter value for quantity: 2
old 4: '&quantity')
new 4: '2')
1 row created.
SQL> insert into select_product values(1,3,1);
1 row created.
```

SQL> insert into select_product values(2,3,3);

1 row created.

SQL> insert into select_product values(3,2,1);

1 row created.

INSERT INTO TRANSACTIONS:

SQL> insert into transaction values(

- 2 '&id',
- 3 '&total_amount',
- 4 '&paid',
- 5 '&due',
- 6 '&gst',
- 7 '&discount',
- 8 '&payment_method',
- 9 '&cart_id');

Enter value for id: 1

old 2: '&id',

new 2: '1',

Enter value for total_amount: 57000

old 3: '&total_amount',

new 3: '25000',

Enter value for paid: 2000

old 4: '&paid',

new 4: '20000',

Enter value for due: 5000

old 5: '&due',

new 5: '5000',

Enter value for gst: 350

old 6: '&gst',

new 6: '350',

Enter value for discount: 350

old 7: '&discount',

new 7: '350',

Enter value for payment_method: card

old 8: '&payment_method',

new 8: 'card',

Enter value for cart_id: 1

old 9: '&cart_id')

new 9: '1')

1 row created.

```
insert into transaction values(2,57000,57000,0,570,570,'cash',2);

SQL> insert into transaction values(3,19000,17000,2000,190,190,'cash',3);

1 row created. SQL> insert into transaction values(3,19000,17000,2000,190,190,'cash',3);

1 row created.
```

PL/SQL

Functions:

```
SQL> declare
 2 due1 number(7);
 3 cart_id1 number(7);
 4 function get_cart(c_id number)return number is
 5 begin
 6 return (c id);
 7 end;
 8 begin
 9 cart_id1:=get_cart('&c_id');
10 select due into due1 from transaction where cart_id=cart_id1;
11 dbms_output.put_line(due1);
12 end;
13 /
Enter value for c_id: 1
old 9: cart_id1:=get_cart('&c_id');
new 9: cart_id1:=get_cart('1');
5000
```

Cursors:

```
SQL> DECLARE2 p_id product.pid%type;3 p_name product.pname%type;
```

PL/SQL procedure successfully completed.

```
4 p_stock product.p_stock%type;
5 cursor p_product is
 6 select pid,pname ,p_stock from product;
 7 begin
 8 open p_product;
 9 loop
10 fetch p_product into p_id,p_name,p_stock;
11 exit when p_product%notfound;
12 dbms_output.put_line(p_id||' '||p_name||' '||p_stock);
13 end loop;
14 close p_product;
15 end;
16 /
1 IPHONE 4
2 Airpods 3
3 Smart Watch 3
4 Air Max 6
5 REFINED OIL 6
```

PL/SQL procedure successfully completed.

Procedure:

```
SQL> DECLARE
 2
    a number;
    b number;
 4 PROCEDURE check_stock(x IN number) IS
 5 BEGIN
    IF x < 2 THEN
 6
      dbms_output.put_line('Stock is Less');
 7
 8
     ELSE
      dbms_output.put_line('Enough
 9
Stock'); 10 END IF;
11 END;
12 BEGIN
13 b:='&b';
14 select p_stock into a from product where pid=b;
15 check_stock(a);
16 END;
```

17 / Enter value for b: 2 old 13: b:='&b'; new 13: b:='2'; Enough Stock

PL/SQL procedure successfully completed.