# B.TECH. (CSE) VI SEMESTER

**UE20CS301 – Database Management Systems (Minors)**

**Mini-Project Report**

**on**

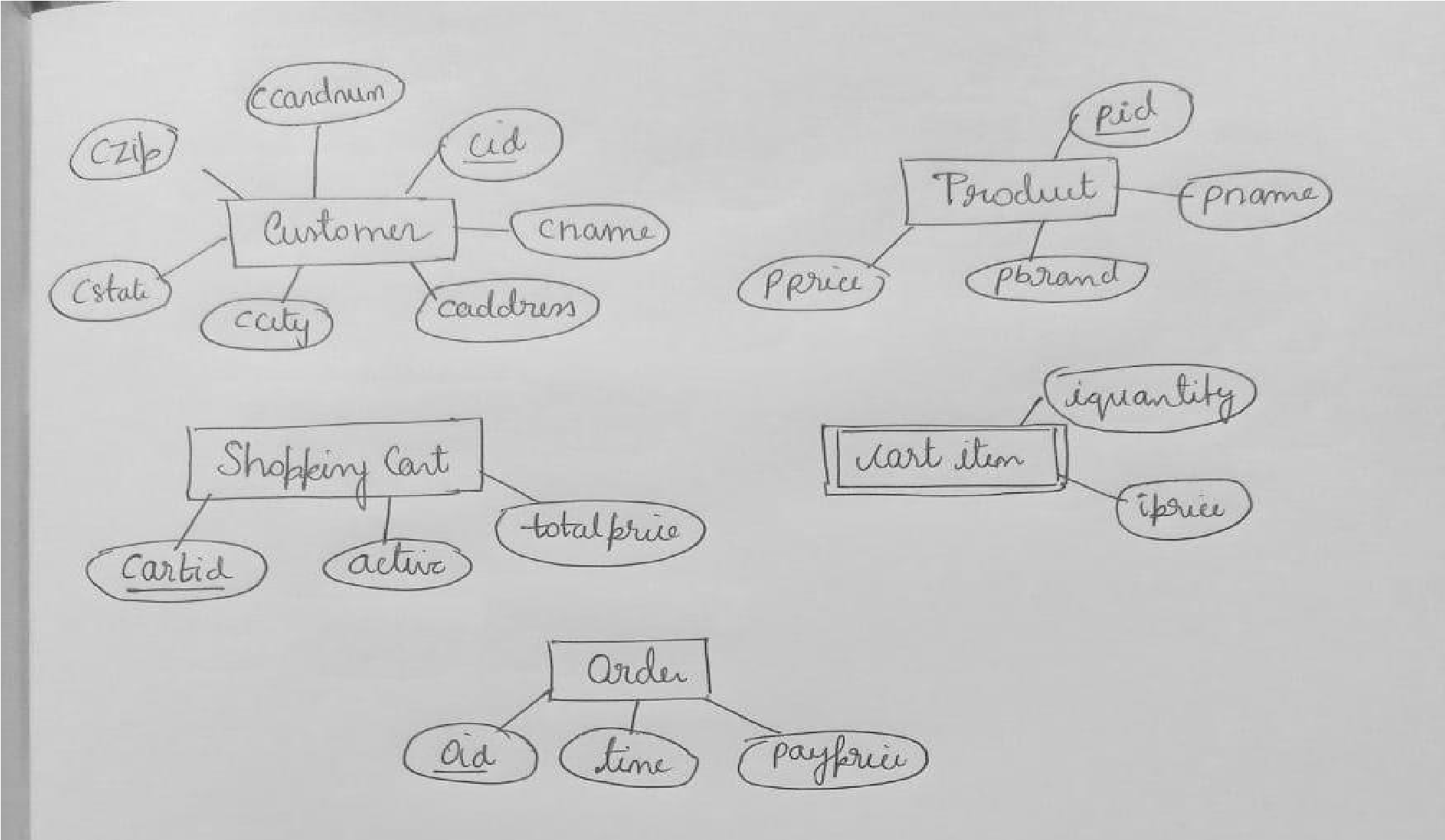
**Title**

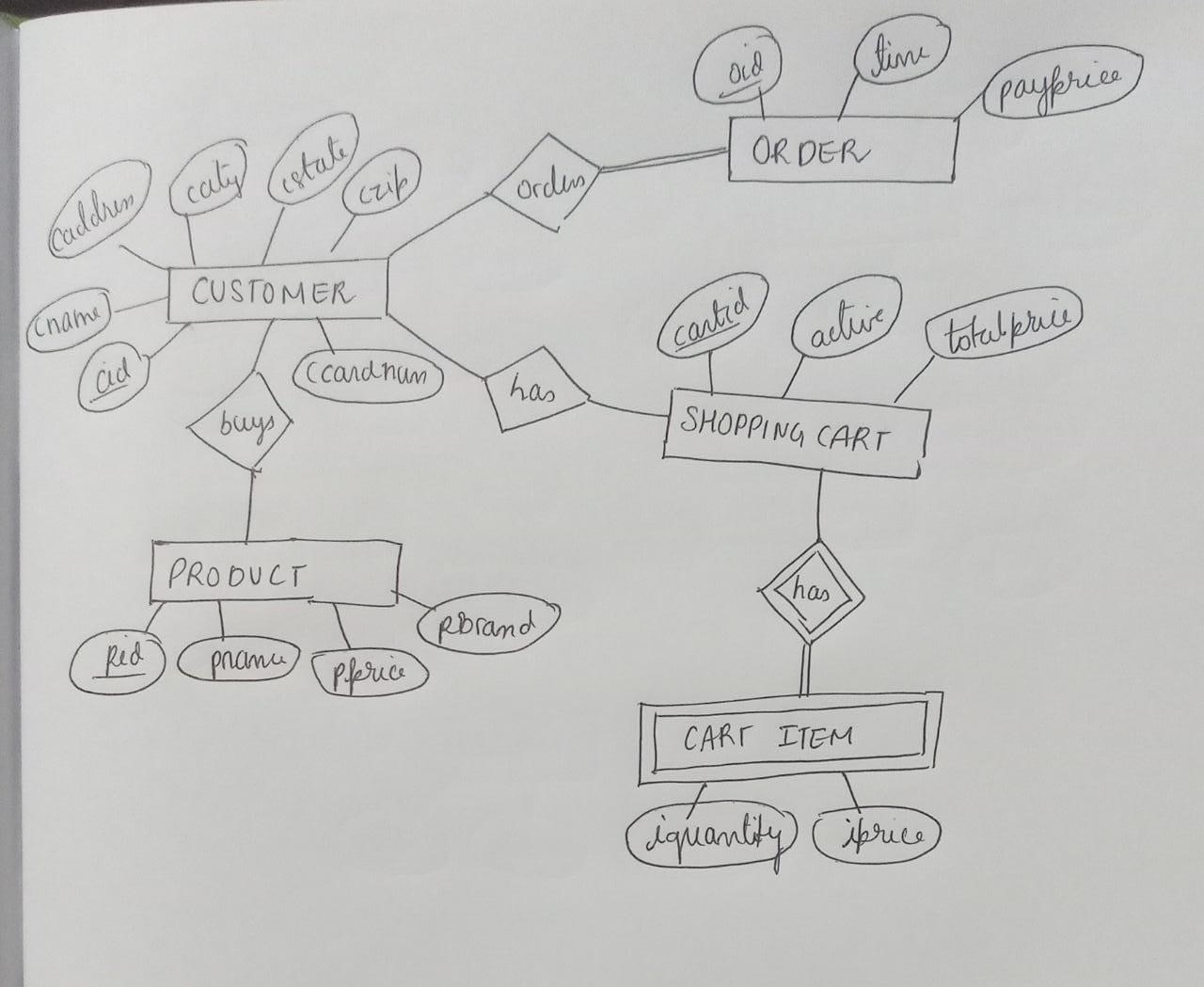
**MALL DATABASE MANAGEMENT SYSTEM**

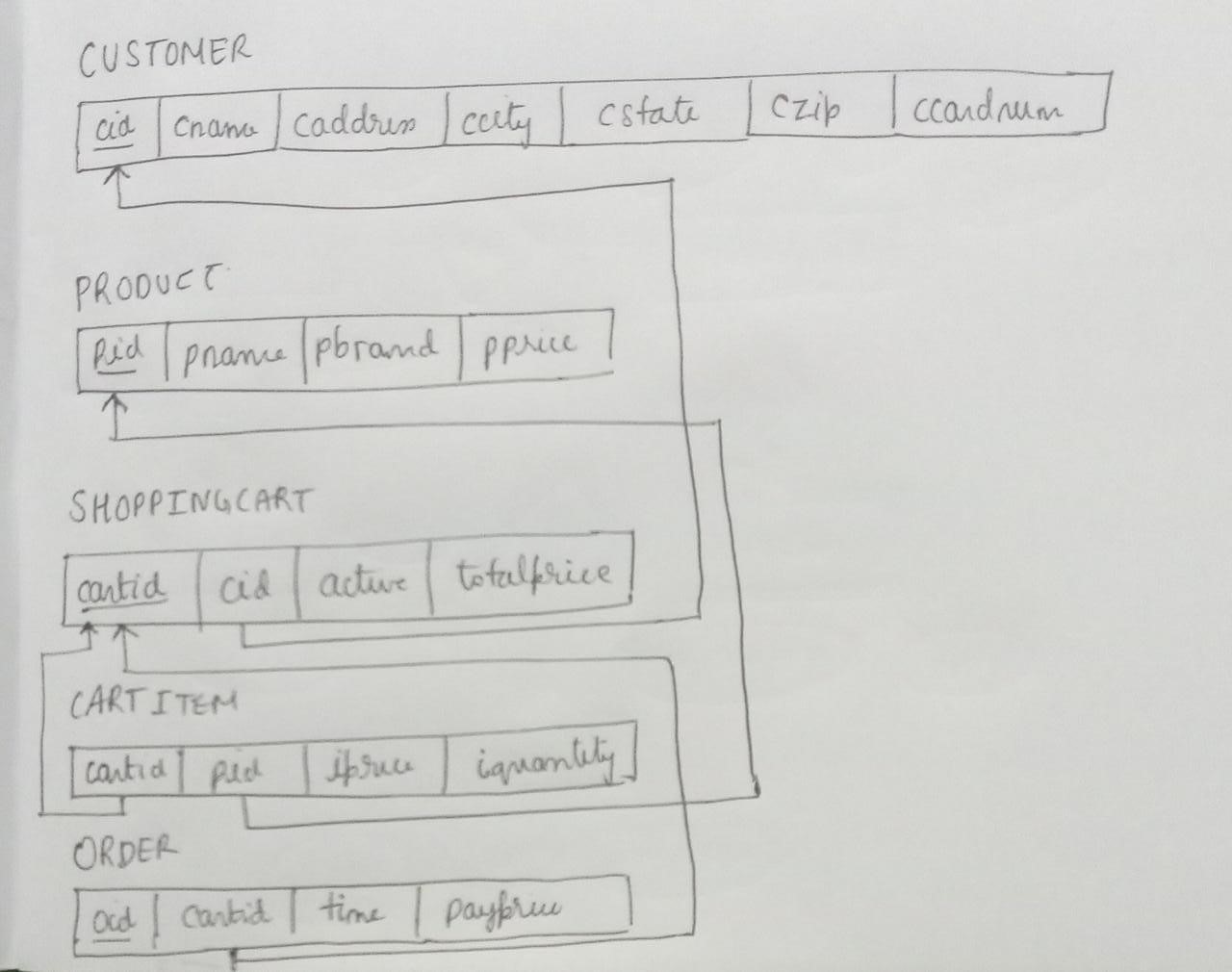
## SUBMITTED BY

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| --- | --- |
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* ENTITIES AND ATTRIBUTES



* E-R DIAGRAM
* RELATIONAL SCHEMA



* QUERIES

create table CUSTOMER(cid int NOT NULL, cname varchar(255),

caddress varchar(255),ccity varchar(25),cstate varchar(25),czip varchar(25),ccardnum varchar(255),PRIMARY KEY(cid));

create table PRODUCT(pid int NOT NULL, pname varchar(255), pbrand

varchar(255), pprice DECIMAL(10,2), PRIMARY KEY(pid));

create table SHOPPING\_CART(cartid int NOT NULL, cid int, active

int default 1, totalprice DECIMAL(10,2), PRIMARY

KEY(cartid),FOREIGN KEY (cid) REFERENCES CUSTOMER(cid));

create table CART\_ITEM(iprice DECIMAL(10,2), iquantity int,cartid

int, pid int, price int, FOREIGN KEY (cartid)

REFERENCES SHOPPING\_CART(cartid),FOREIGN KEY (pid) REFERENCES

PRODUCT(pid));

create table ORDER\_t(oid int NOT NULL, cartid int, time TIME ,

payprice DECIMAL(10,2), PRIMARY KEY(oid), FOREIGN KEY (cartid)REFERENCES SHOPPING\_CART(cartid));

**For cname in CUSTOMER table add NOT NULL CONSTRAINT:**

ALTER TABLE CUSTOMER MODIFY cname varchar(255) NOT NULL; **CARD NUMBER SHOULD BE UNIQUE:**

ALTER table CUSTOMER ADD UNIQUE (ccardnum);

**RENAME TABLE ORDER\_t to ORDER\_cust**

Rename table ORDER\_t to ORDER\_cust;

**CREATE VIEW for 2nd cart\_id order details:**

Create view 2nd\_order\_details AS select cartid,pid,iprice,iquantity from CART\_ITEM where cartid=2;

insert into CUSTOMER

(cid,cname,caddress,ccity,cstate,czip,ccardnum) values

(1,'aradhya','no.2532, 15th cross, BSK 2nd stage',

'Bangalore','karnataka','560070','984654361762354'); insert into CUSTOMER

(cid,cname,caddress,ccity,cstate,czip,ccardnum) values

(2,'[Maninder](https://www.behindthename.com/name/maninder)','no.7655, 18th cross, Amaravathi 2nd stage',

'Amaravathi','Andhra

Pradesh','560034','227138495696302'),(3,'Naya','no.5623, 19th cross, Itanagar 2nd stage',

'Itanagar','[Arunachal](https://www.majorcitiesofworld.com/major-cities-in-arunachal-pradesh-india/) [Pradesh](https://www.majorcitiesofworld.com/major-cities-in-arunachal-pradesh-india/)','560054','115886170160191

'),(4,'Ishaan','no.8978, 13th cross, Dispur 2nd stage',

'Dispur','[Assam](https://www.majorcitiesofworld.com/major-cities-in-assam-india/)','560023','693317141277093'),(5,'Jai','no.1111,

11th cross,Patna 2nd stage',

'Patna','[Bihar](https://www.majorcitiesofworld.com/major-cities-in-bihar-india/)','560012','718978106833907'),(6,'Inaya','no.2323,

18th cross, Raipur 2nd stage',

'Raipur','[Chhattisgarh](https://www.majorcitiesofworld.com/major-cities-in-chhattisgarh-india/)','560088','773897952020970'),(7,'Amar','no.

2532, 12th cross, Panaji 2nd stage',

'Panaji','[Goa](https://www.majorcitiesofworld.com/major-cities-in-goa-india/)','560071','9942724291700247'),(8,'Navi','no.2542,

29th cross, Gandhi 2nd stage',

'Gandhinagar','[Gujarat](https://www.majorcitiesofworld.com/major-cities-in-gujarat-india/)','560453','134562244867778'),(9,'aadira','n o.1987, 37th cross, Chandigarh 2nd stage',

'Chandigarh','Haryana','560010','959417838538581'),(10,'abhi','no.

2352, 16th cross, Simla 2nd stage',

'Shimla','[Himachal](https://www.majorcitiesofworld.com/major-cities-in-himachal-pradesh-india/)

[Pradesh](https://www.majorcitiesofworld.com/major-cities-in-himachal-pradesh-india/)','560080','380884706153595'),(11,'manu','no.2222, 18th cross, Ranchi 2nd stage',

'Ranchi','[Jharkhand](https://www.majorcitiesofworld.com/major-cities-in-jharkhand-india/)','560450','141021046946817'),(12,'vinoth','no. 4343, 45th cross, Trivandrum 2nd stage',

'Trivandrum','[Kerala](https://www.majorcitiesofworld.com/major-cities-in-kerala/)','5600560','070876750973812'),(13,'manjula',' no.1824, 10th cross, Bhopal 2nd stage',

'Bhopal','[Madhya](https://www.majorcitiesofworld.com/major-cities-in-madhya-pradesh/)

[Pradesh](https://www.majorcitiesofworld.com/major-cities-in-madhya-pradesh/)','560270','190304788460859'),(14,'dhruv','no.135, 9th cross, Mumbai 2nd stage', 'Mumbai','[Maharashtra](https://www.majorcitiesofworld.com/major-cities-in-maharashtra/)','560370','245400304669155'),(15,'kanan','no

.2590, 8th cross, Imphal 2nd stage',

'Imphal','[Manipur](https://www.majorcitiesofworld.com/major-cities-in-manipur-india/)','562370','105599942367286'); select \* from CUSTOMER;



insert into PRODUCT (pid,pname,pbrand,pprice) values (1,'Analog Black dial ','TIMEX ',1851.50),(2,'Dial coloured strap ','TIMEX

',2586.50),(31,'Men’s formal shoes ','CENTRINO ',697),(4,'Men

5951-35 ','CENTRINO ',2299),(5,'Women’s slider ','URJO

',1099.50),(6,'ANGULAR HOLDER KITCHEN KNIVES ','PIGEON

',695.50),(7,'GALAXY M14 5G','SAMSUNG ',14990.50),(8,'NORD CE 2

LITE','ONE PLUS ',18499.50),(9,'ULTRA SHEER DRY

TOUCH','neutrogena',1867.50),(10,'NUTRI BLEND MIXER

','WONDERCHEF',2598.50);



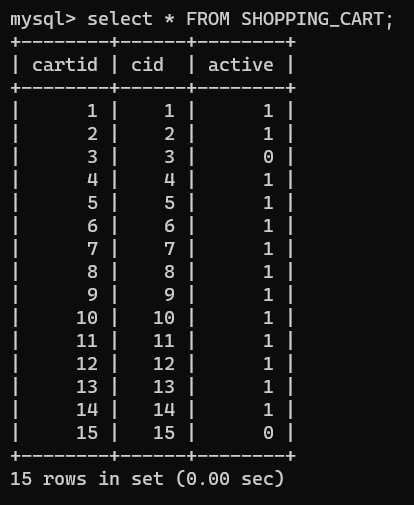
Insert into SHOPPING\_CART(cartid,cid,active) values(1,1,1),

(2,2,1),(3,3,0),(4,4,1),(5,5,1),(6,6,1),(7,7,1),(8,8,1),(9,9,1),(1

0,10,1),(11,11,1),(12,12,1),(13,13,1),(14,14,1),(15,15,0);

**DROP COLUMN TOTAL\_PRICE:**

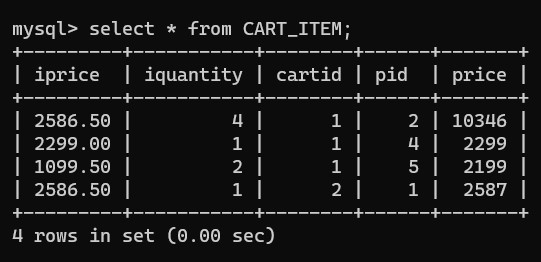
ALTER TABLE SHOPPING\_CART DROP COLUMN totalprice;

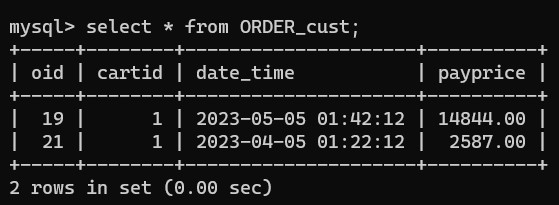


Insert into CART\_ITEM(cartid,pid,iprice,iquantity) values

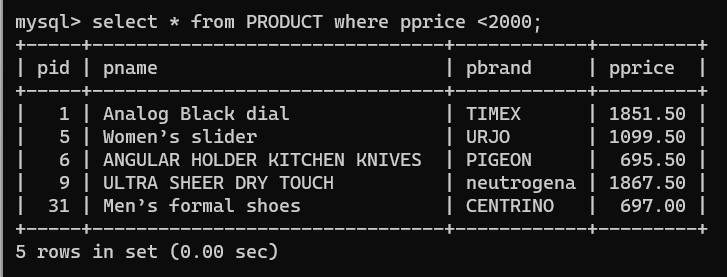
(1,2,2586.50,4),(1,4,2299,1),(1,5,1099.50,2),(2,1,2586.50,1);

UPDATE CART\_ITEM set price=iprice\*iquantity;

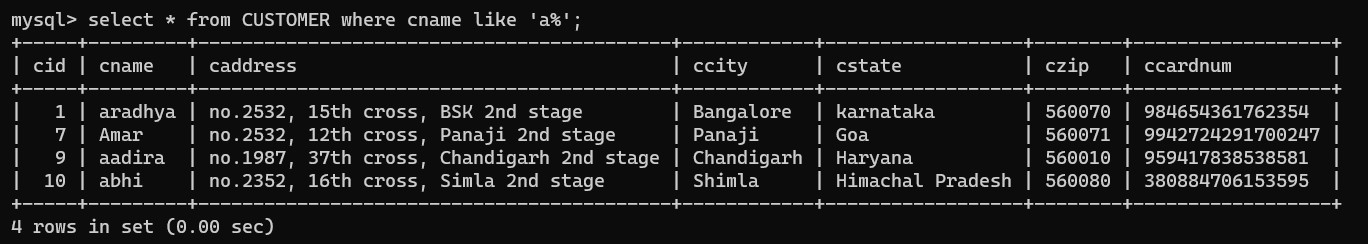




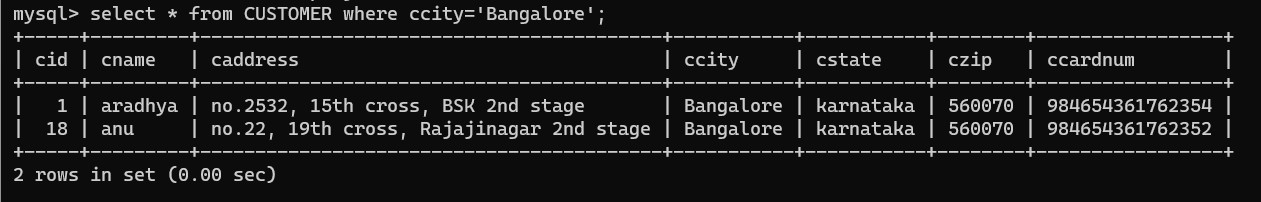
**Display all products whose price is within 2000:**



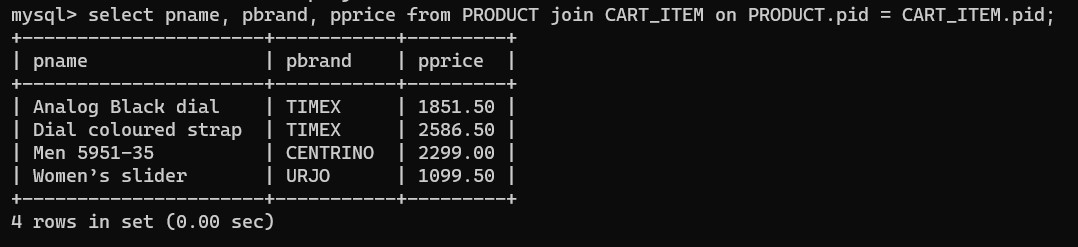
**Display the customer whose name starts with the letter ‘a’**

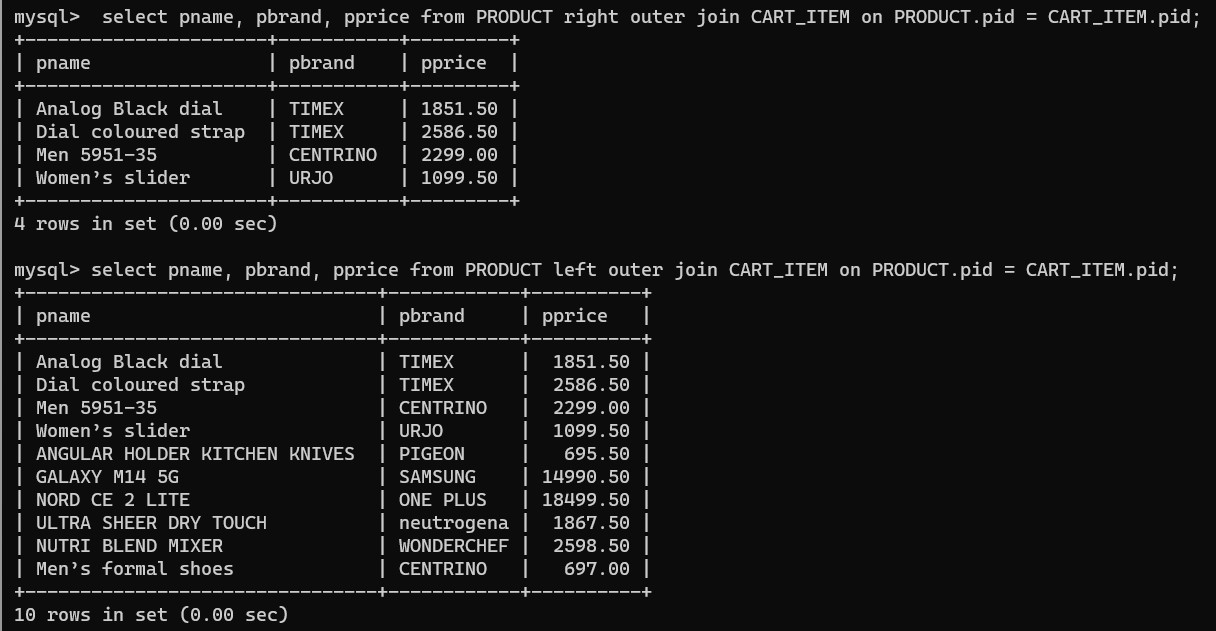


**Find the customer details who are from Bangalore:**

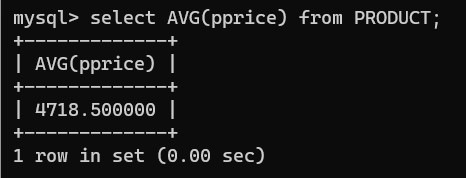


**Select the information of products which were ordered:**

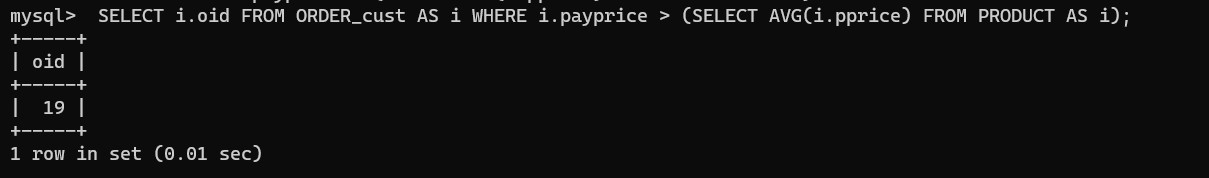




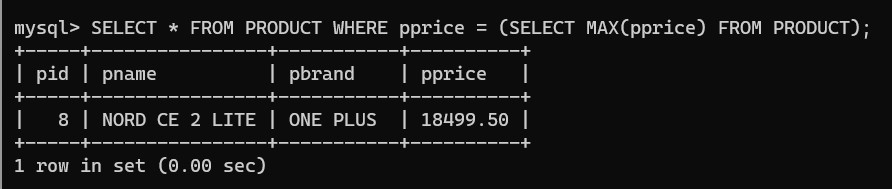
**Average price of products:**



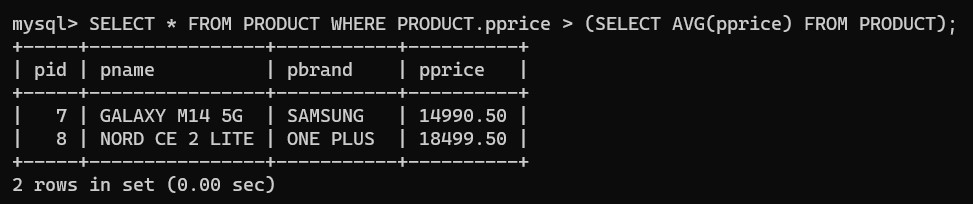
**Determine the OID who has amount greater than the average amount:**



**Retrieve all the details of products which have a maximum price.**



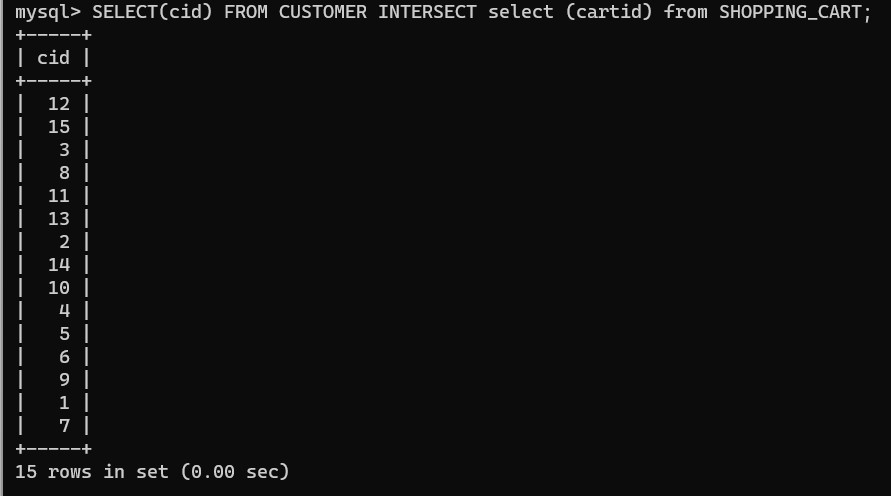
**Retrieve all details of the products whose price is greater than the average price of products in the table**



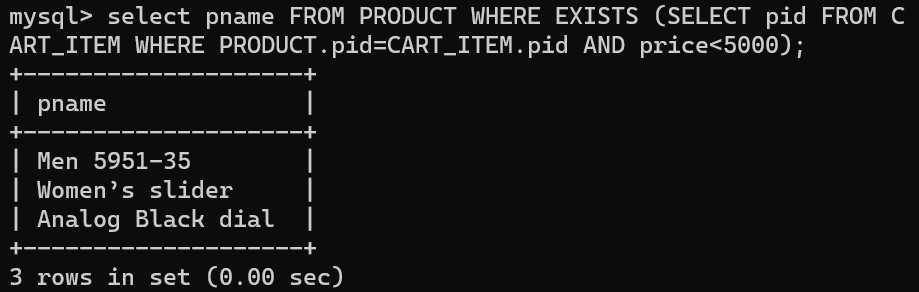
**Retrieve the count of the city of customers:**







# lists the products with a product price less than 5000



UPDATE CUSTOMER SET dob = '1980-07-09' where cid=1;

UPDATE CUSTOMER SET dob = '1977-07-11' where cid=2;

UPDATE CUSTOMER SET dob = '1963-12-26' where cid=3;

UPDATE CUSTOMER SET dob = '1971-09-18' where cid=4; UPDATE CUSTOMER SET dob = '1948-08-11' where cid=5;

UPDATE CUSTOMER SET dob = '1967-08-12' where cid=6;

UPDATE CUSTOMER SET dob = '1980-09-30' where cid=7;

UPDATE CUSTOMER SET dob = '1980-06-26' where cid=8;

UPDATE CUSTOMER SET dob = '1924-08-16' where cid=9;

UPDATE CUSTOMER SET dob = '1977-04-20' where cid=10;

UPDATE CUSTOMER SET dob = '2002-10-07' where cid=11;

UPDATE CUSTOMER SET dob = '1923-11-29' where cid=12;

UPDATE CUSTOMER SET dob = '1980-11-04' where cid=13;

UPDATE CUSTOMER SET dob = '1974-11-10' where cid=14;

UPDATE CUSTOMER SET dob = '1992-11-08' where cid=15;

* Write a function to find the number of products with pid in shopping cart.

DELIMITER $$

CREATE FUNCTION no\_of\_products( product\_id INT

)

RETURNS INT

DETERMINISTIC

BEGIN

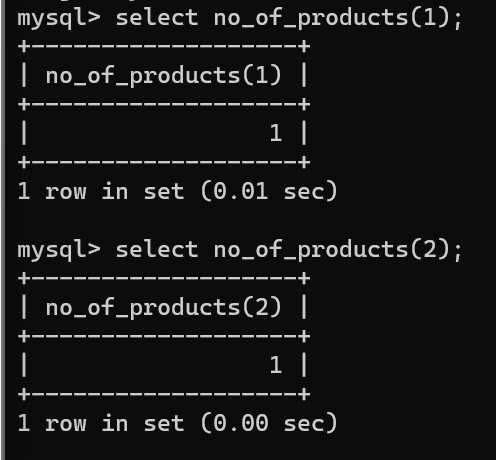
DECLARE count INT;

SELECT COUNT(\*) INTO count FROM CART\_ITEM WHERE pid = product\_id;

RETURN count;

END $$

DELIMITER ;



* Write a stored procedure to calculate the age of the customer when the date of birth is given. Update the column named age in the customer table.

DELIMITER $$

CREATE PROCEDURE calculate\_age\_final(

user\_id INT

)

BEGIN

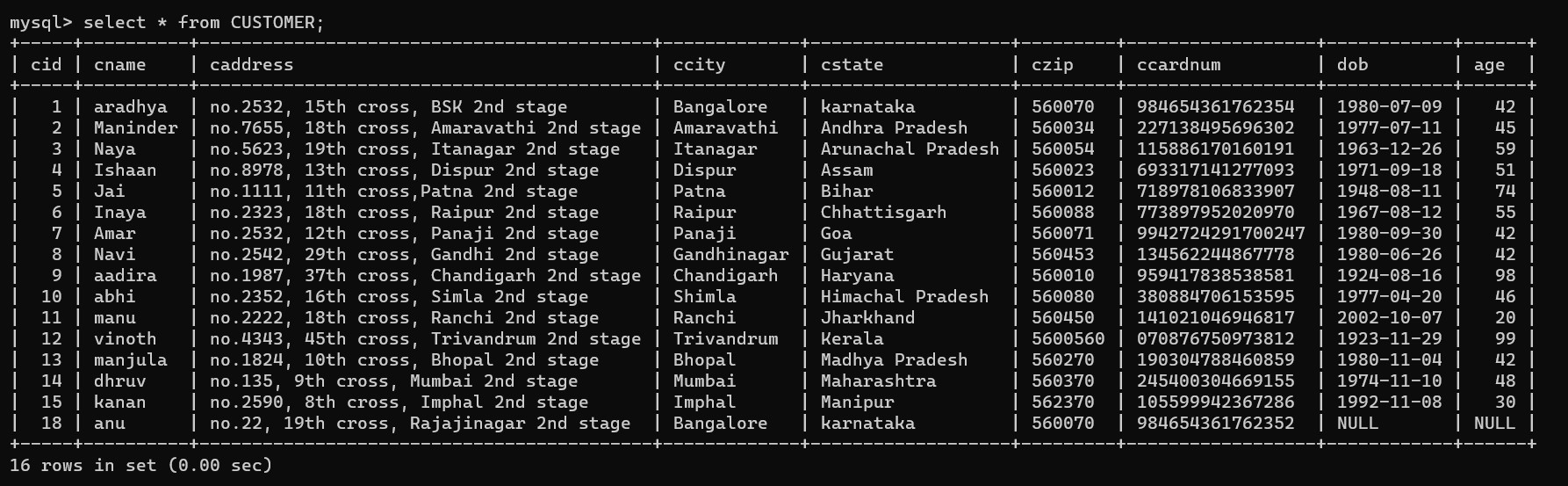
DECLARE age INT;

UPDATE CUSTOMER SET age = TIMESTAMPDIFF(YEAR, DOB,

CURDATE()) WHERE user\_id=cid; END $$

DELIMITER ;

call calculate\_age\_final(1); call calculate\_age\_final(2); call calculate\_age\_final(3); call calculate\_age\_final(4); call calculate\_age\_final(5); call calculate\_age\_final(6); call calculate\_age\_final(7); call calculate\_age\_final(8); call calculate\_age\_final(9); call calculate\_age\_final(10); call calculate\_age\_final(11); call calculate\_age\_final(12); call calculate\_age\_final(13); call calculate\_age\_final(14); call calculate\_age\_final(15);



* **Create triggers that, when the price of a certain product changes, update the price of this item in any active shopping cart containing the item, and also updates the total price of these shopping carts?.**

DELIMITER $$

CREATE TRIGGER product\_priceupdate

AFTER UPDATE ON product

FOR EACH ROW

BEGIN

UPDATE cartitem i JOIN shoppingcart c

ON i.cartid = c.cartid

SET i.iprice = NEW.pprice

WHERE i.pid = NEW.pid

AND c.active = 1;

UPDATE shoppingcart c JOIN

(

SELECT cartid, SUM(iprice \* iquantity) totalprice

FROM cartitem

WHERE cartid IN

(

SELECT DISTINCT i.cartid

FROM cartitem i JOIN shoppingcart c

ON i.cartid = c.cartid

WHERE i.pid = NEW.pid AND c.active = 1

) GROUP BY cartid

) q

ON c.cartid = q.cartid SET c.totalprice = q.totalprice;

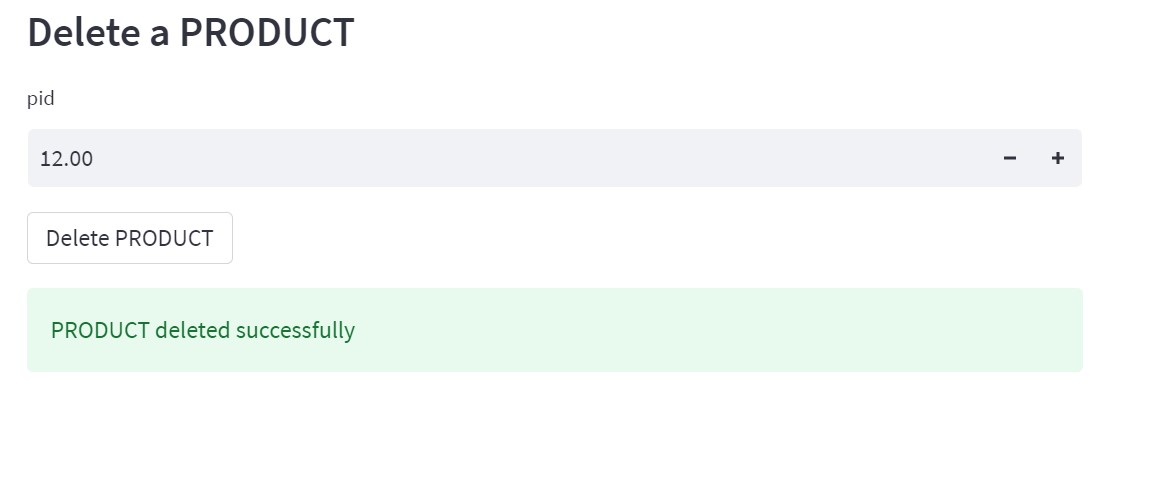
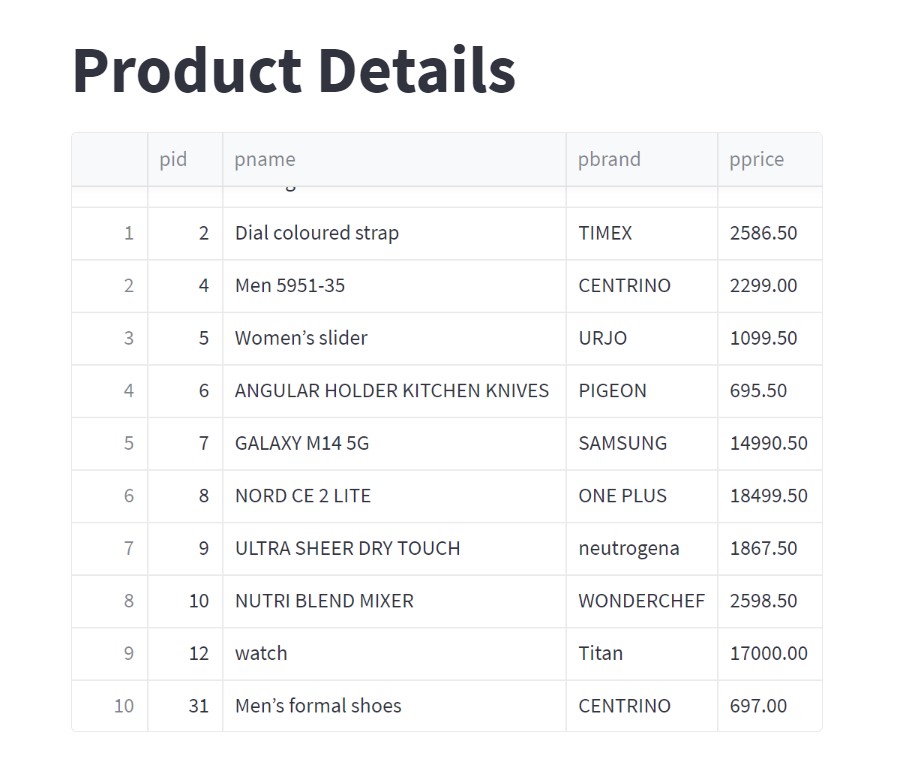
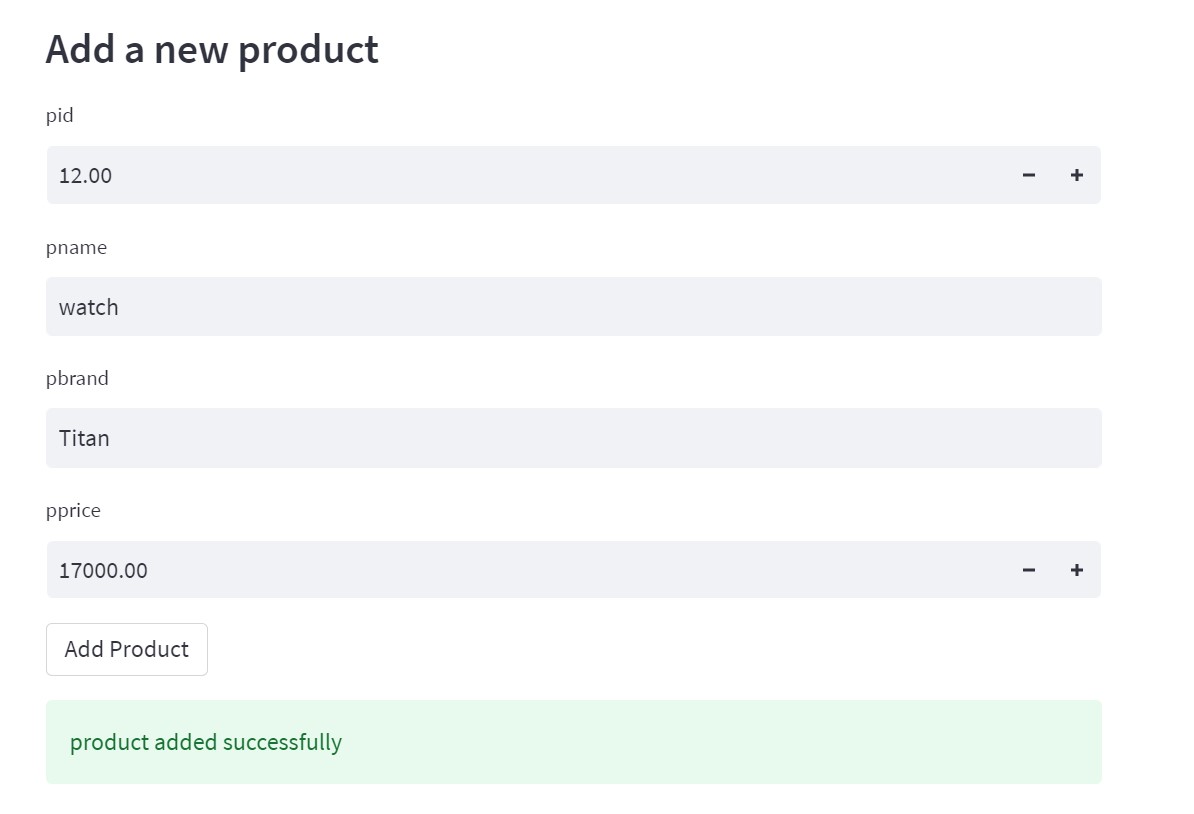
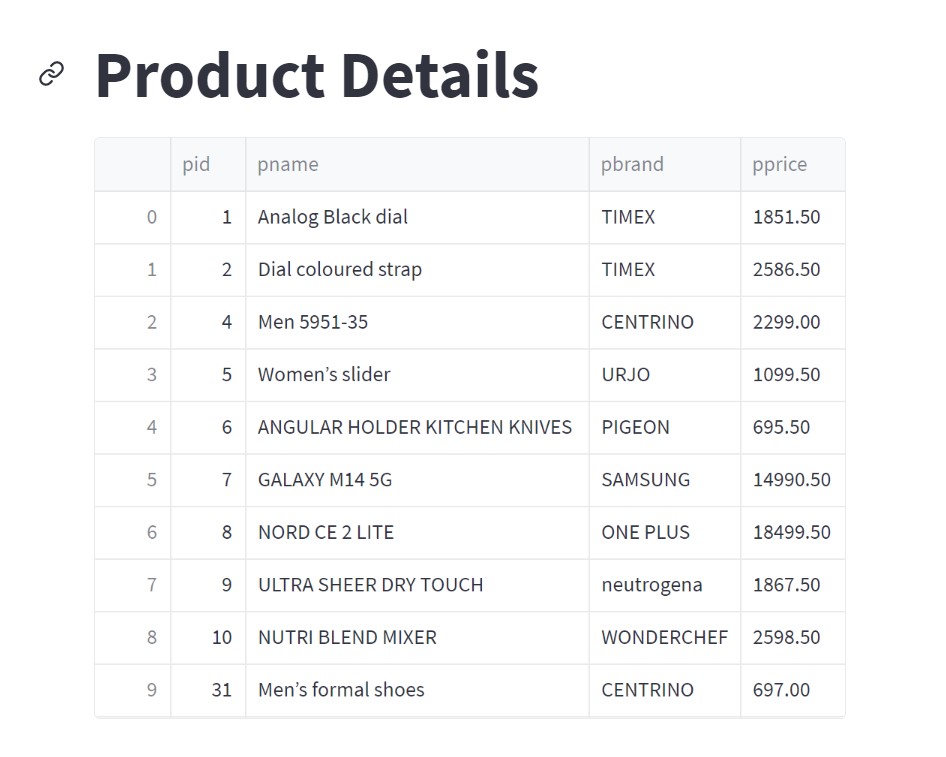
END$$

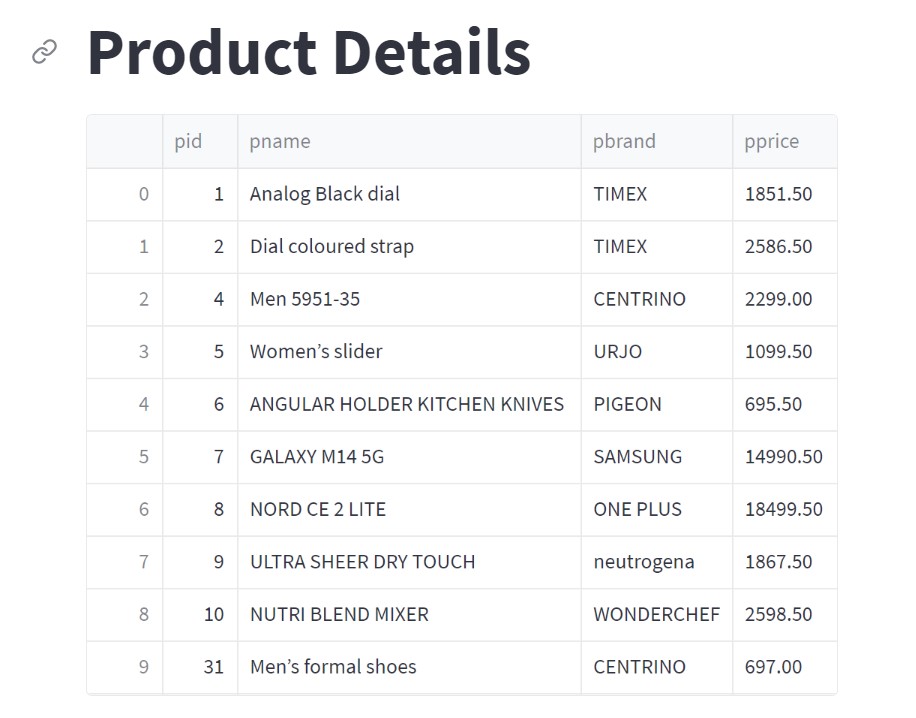
DELIMITER ;

|  |
| --- |
| import mysql.connector |
| import streamlit as st |
| import pandas as pd |
|  |
| db = mysql.connector.connect( |
| host="localhost", |
| port="3307", |
| user="root", |
| password="Mitha@03", |
| database="proj\_final" |
| ) |
|  |
| cursor = db.cursor() |
|  |
| st.title("Product Details") |
|  |
| cursor.execute("SELECT \* FROM PRODUCT") |
| st.dataframe(pd.DataFrame(cursor.fetchall(), columns=("pid", "pname", |
| "pbrand", "pprice"))) |
|  |

|  |
| --- |
| st.subheader("Add a new product") |
| pid = st.number\_input("pid",key="pid\_create") |
| pname = st.text\_input("pname",key="pname\_create") |
| pbrand = st.text\_input("pbrand",key="pbrand\_create") |
| pprice = st.number\_input("pprice",key="pprice\_create") |
| if st.button("Add Product"): |
| cursor.execute("INSERT INTO PRODUCT VALUES (%s, %s, %s, %s)", (pid, pname, |
| pbrand, pprice)) |
| db.commit() |
| st.success("product added successfully") |
| st.subheader("Update a product") |
| pid = st.number\_input("pid",key="pid\_update") |
| pname = st.text\_input("pname",key="pname\_update") |
| train\_type = st.text\_input("pbrand",key="pbrand\_update") |
| pprice = st.number\_input("pprice",key="pprice\_update") |
| st.subheader("Delete a PRODUCT") |
| pid = st.number\_input("pid",key="pid\_delete") |
| if st.button("Delete PRODUCT"): |
| cursor.execute("DELETE FROM PRODUCT WHERE pid = %s", (pid,)) |
| db.commit() |
| st.success("PRODUCT deleted successfully") |
|  |
| cursor.close() |
| db.close() |
|  |

**CRUD OPERATIONS**





import mysql.connector  
import streamlit as st  
import pandas as pd  
  
db = mysql.connector.connect(  
 host="localhost",  
 port="3307",  
 user="root",  
 password="Mitha@03",  
 database="proj\_final"  
)  
  
cursor = db.cursor()  
  
st.title("CART Details")  
  
cursor.execute("SELECT \* FROM shopping\_cart")  
st.dataframe(pd.DataFrame(cursor.fetchall(), columns=("cartid", "cid", "active")))  
st.subheader("Update status of customer")  
cartid = st.number\_input("cartid", key="cartid\_update")  
active = st.number\_input("active", key="active\_update")  
if st.button("Update product"):  
 cursor.execute("UPDATE shopping\_cart SET active = %s, WHERE cartid = %s ",  
 (active,cartid))  
 db.commit()  
 st.success("status updated successfully")  
  
cursor.close()  
db.close()





