

RANU RAJPUT
Employee Id 1743

JDBC Assignment

Create on Product Table with Schema
Product(pid (pk), price, name)
Cart(pid(fk), qty)

Insert all unique records (put your first name as suffix to each product)
Find out the total price to be paid at the time of check out.

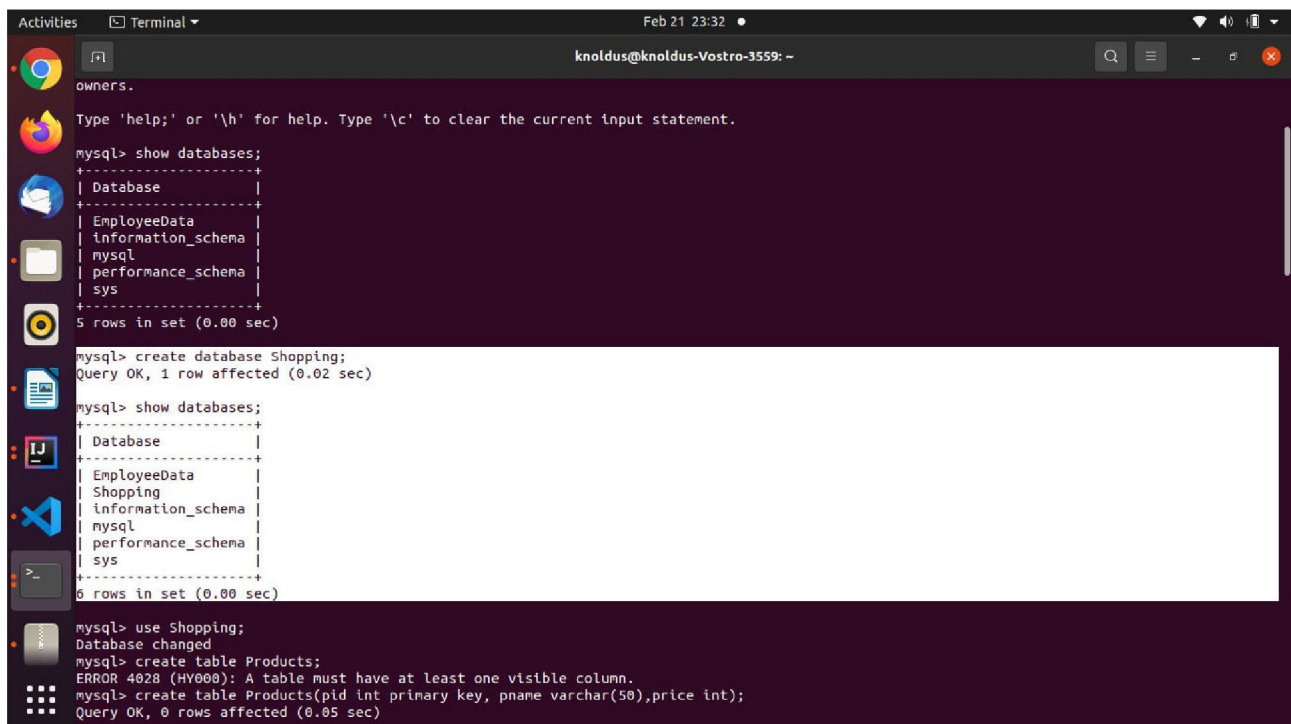
The example data shown should be changed in before being inserted into the table. e.g.

If your name is "Akash" then product table entries should be like below:
(pid -> 1, pname -> "Reynolds 405_Akash", price-> 8)

You can use MySQL console to insert data into the table.
Use JDBC API to Make a query.

Creating database and tables by using MySQL-->

Create database Shopping;



```
knoldus@knoldus-Vostro-3559: ~$ mysql
mysql> show databases;
+-----+
| Database |
+-----+
| EmployeeData |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.00 sec)

mysql> create database Shopping;
Query OK, 1 row affected (0.02 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| EmployeeData |
| Shopping |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
6 rows in set (0.00 sec)

mysql> use Shopping;
Database changed
mysql> create table Products;
ERROR 4028 (HY000): A table must have at least one visible column.
mysql> create table Products(pid int primary key, pname varchar(50), price int);
Query OK, 0 rows affected (0.05 sec)
```

Enter into database Shopping using **use Shopping ;**

create table Products(pid int primary key, pname varchar(50),price int);

for products table structure-->

desc Products;

```
Activities Terminal Feb 21 23:37 knoldus@knoldus-Vostro-3559: ~

mysql> show databases;
+-----+
| Database |
+-----+
| EmployeeData |
| Shopping |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
6 rows in set (0.00 sec)

mysql> use Shopping;
Database changed
mysql> create table Products;
ERROR 4028 (HY000): A table must have at least one visible column.
mysql> create table Products(pid int primary key, pname varchar(50),price int);
Query OK, 0 rows affected (0.05 sec)

mysql> desc Products;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| pid | int | NO | PRI | NULL | |
| pname | varchar(50) | YES | | NULL | |
| price | int | YES | | NULL | |
+-----+
3 rows in set (0.00 sec)

mysql> insert into Products values(1,'Reynolds 405_Ranu',8);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Products values(1,'Reynolds 405_Ranu',8);
ERROR 1062 (23000): Duplicate entry '1' for key 'Products.PRIMARY'
mysql> insert into Products values(2,'HB Draw Pencil_Ranu',10);
Query OK, 1 row affected (0.01 sec)
```

Insert values in Products table ,
insert into Products values(1,'Reynolds 405_Ranu',8);
insert into Products values(2,'HB Draw Pencil_Ranu',10);
insert into Products values(3,'Crayons Rainbow_Ranu',12);
insert into Products values(4,'Notebook_Ranu',14);
insert into Products values(5,'DrawSheets_Ranu',16);
insert into Products values(6,'Brush Air_Ranu',5);

for Products table -->
select * from Products;

```
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ERROR 1062 (23000): Duplicate entry '1' for key 'Products.PRIMARY'
mysql> insert into Products values(2,'HB Draw Pencil_Ranu',10);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Products values(3,'Crayons Rainbow_Ranu',12);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Products values(4,'Notebook_Ranu',14);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Products values(5,'DrawSheets_Ranu',16);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Products values(6,'Brush Air_Ranu',5);
Query OK, 1 row affected (0.01 sec)

mysql> desc Products;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| pid | int | NO | PRI | NULL | |
| pname | varchar(50) | YES | | NULL | |
| price | int | YES | | NULL | |
+-----+
3 rows in set (0.00 sec)

mysql> select * from Products;
+-----+
| pid | pname | price |
+-----+
| 1 | Reynolds 405_Ranu | 8 |
| 2 | HB Draw Pencil_Ranu | 10 |
| 3 | Crayons Rainbow_Ranu | 12 |
| 4 | Notebook_Ranu | 14 |
| 5 | DrawSheets_Ranu | 16 |
| 6 | Brush Air_Ranu | 5 |
+-----+
6 rows in set (0.00 sec)
```

Creating cart table -->

```
create table Cart(pid int, qty int, constraint fk_Products FOREIGN KEY (pid) REFERENCES Products(pid));
```

for structure of cart table -->

```
desc Cart;
```

for inserting values into Cart table -->

```
insert into Cart values(1,2);
```

```
insert into Cart values(2,3);
```

```
insert into Cart values(3,5);
```

for showing Cart table -->

```
Select * from Cart;
```



The screenshot shows a terminal window with the following MySQL commands and output:

```
mysql> create table Cart(pid int, qty int, constraint fk_Products FOREIGN KEY (pid) REFERENCES Products(pid));
Query OK, 0 rows affected (0.07 sec)

mysql> insert into Cart values(1,2);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Cart values(2,3);
Query OK, 1 row affected (0.01 sec)

mysql> insert into Cart values(3,5);
Query OK, 1 row affected (0.01 sec)

mysql> desc Cart;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| pid   | int  | YES  | MUL | NULL    |       |
| qty   | int  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from Cart;
+-----+-----+
| pid | qty |
+-----+-----+
| 1   | 2   |
| 2   | 3   |
| 3   | 5   |
+-----+-----+
3 rows in set (0.00 sec)

mysql> select sum(qty*price) from Cart,Products where Cart.pid = Products.pid;
+-----+
| sum(qty*price) |
+-----+
|          106   |
+-----+
1 row in set (0.00 sec)
```

apply another query -->

```
select sum(qty*price) from Cart,Products where Cart.pid = Products.pid;
```

```
Activities Terminal Feb 21 23:56 knoldus@knoldus-Vostro-3559: ~  
Query OK, 0 rows affected (0.07 sec)  
mysql> insert into Cart values(1,2);  
Query OK, 1 row affected (0.01 sec)  
mysql> insert into Cart values(2,3);  
Query OK, 1 row affected (0.01 sec)  
mysql> insert into Cart values(3,5);  
Query OK, 1 row affected (0.01 sec)  
mysql> desc Cart;  
+-----+  
| Field | Type | Null | Key | Default | Extra |  
+-----+  
| pid   | int  | YES  | MUL | NULL    |       |  
| qty   | int  | YES  |     | NULL    |       |  
+-----+  
2 rows in set (0.00 sec)  
mysql> select * from Cart;  
+-----+  
| pid | qty |  
+-----+  
| 1   | 2   |  
| 2   | 3   |  
| 3   | 5   |  
+-----+  
3 rows in set (0.00 sec)  
mysql> select sum(qty*price) from Cart,Products where Cart.pid = Products.pid;  
+-----+  
| sum(qty*price) |  
+-----+  
| 106             |  
+-----+  
1 row in set (0.00 sec)  
mysql> select name, pid from Cart, Products where qty = 5 and Cart.pid = Products.pid;
```