

Heaven's Light is Our Guide
Rajshahi University of Engineering and Technology



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ECE 2216

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Database Systems Sessional

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Lab Report 7: MySQL Query on Database.

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1 Tools Used

- MySQL
- VS Code - as an IDE to use SQL
- MacTeX -L^AT_EX compiler
- VS Code with LaTeX workshop extension as a text editor

2 Process

SQL Codes:

2.0.1 Display the order number, order date & the purchase amount for order(s) which will be delivered by the salesman with ID 5001.

Code:

```
1 SELECT
2     order_no as "Order No",
3     order_date as "Order Date",
4     purchase_amount as "Purchase Amount"
5 FROM
6     Relations.Order
7 WHERE
8     salesman_id = 5001
```

2.0.2 Find the customer name & price of the cheapest items(s) using subquery.

Code:

```
1 SELECT
2     c.customer_name as "Customer Name",
3     o.purchase_amount as "Purchase Amount"
4 from
5     Relations.Customer c,
```

```

6      Relations.Order o
7 WHERE
8      c.customer_id = (
9          SELECT
10             customer_id
11          FROM
12             Relations.Order o
13          WHERE
14             purchase_amount = (
15                 SELECT
16                     min(purchase_amount)
17                 FROM
18                     Relations.Order
19             )
20      )
21 AND purchase_amount = (
22     SELECT
23         min(purchase_amount)
24     FROM
25         Relations.Order
26 )

```

2.0.3 Find those salesmen with all information who gets the commission within a range of 0.12 & 0.14.

Code:

```

1 SELECT
2     salesman_id as "Salesman ID",
3     name as "Salesman Name",
4     city as "City",
5     commission as "Commission"
6 FROM
7     Relations.salesman
8 WHERE
9     commission >= 0.12
10    AND commission <= 0.14

```

2.0.4 Find the total purchase amount of all orders.

Code:

```
1 SELECT
2     sum(purchase_amount) as "Total Purchased Amount"
3 FROM
4     Relations.Order
```

2.0.5 Find the highest purchase amount on date “2016-08-17” for each salesman with their ID.

Code:

```
1 SELECT
2     MAX(purchase_amount) as "Max Purchased Amount",
3     salesman_id as "Salesman ID",
4     order_date as "Order Date"
5 FROM
6     Relations.Order
7 WHERE
8     order_date = "2016-08-17"
9 GROUP BY
10    salesman_id
```

2.0.6 Display all the orders issued by the salesman “Paul Adam” from the orders table.

Code:

```
1 SELECT
2     order_no as "Order No",
3     purchase_amount as "Purchase Amount",
4     order_date as "Order Date",
5     customer_id as "Customer ID",
6     salesman_id as "Salesman ID"
7 FROM
8     Relations.Order
9 WHERE
10    salesman_id = (
11        SELECT
12            salesman_id
13        from
14            Relations.salesman
```

```

15     WHERE
16         name = 'Paul Adam'
17 )

```

3 Output

Order No	Order Date	Purchase Amo...
abc Filter...	abc Filter...	abc Filter...
70002	2016-08-17	65.26
70005	2013-10-17	2400.60
70008	2016-08-17	5760.00
70013	2016-08-17	3045.60

Order number, order date & the purchase amount for order(s) which will be delivered by the salesman with ID 5001

Customer Name	Purchase Amount
abc Filter...	abc Filter...
Nick Romando	65.26

The customer name & price of the cheapest items(s) using sub-query

Salesman ID	Salesman Name	City	Commission
abc Filter...	abc Filter...	abc Filter...	abc Filter...
5002	Nail Knite	Paris	0.13
5003	Lauson Hen	NULL	0.12
5006	Mc Lyon	New York	0.14
5007	Paul Adam	Rome	0.13

Salesmen with all information who gets the commission within a range of 0.12 & 0.14

Total Purchased Amount
abc Filter...
17541.18

The total purchase amount of all orders

Max Purchased Amount	Salesman ID	Order Date
abc Filter...	abc Filter...	abc Filter...
5760.00	5001	2016-08-17
948.50	5002	2016-08-17
110.50	5003	2016-08-17
270.65	5005	2016-08-17
75.29	5007	2016-08-17

The highest purchase amount on date “2016-08-17” for each salesman with their ID

Order No	Purchase Amount	Order Date	Customer ID	Salesman ID
abc Filter...	abc Filter...	abc Filter...	abc Filter...	abc Filter...
70011	75.29	2016-08-17	3003	5007

Display all the orders issued by the salesman “Paul Adam” from the orders table