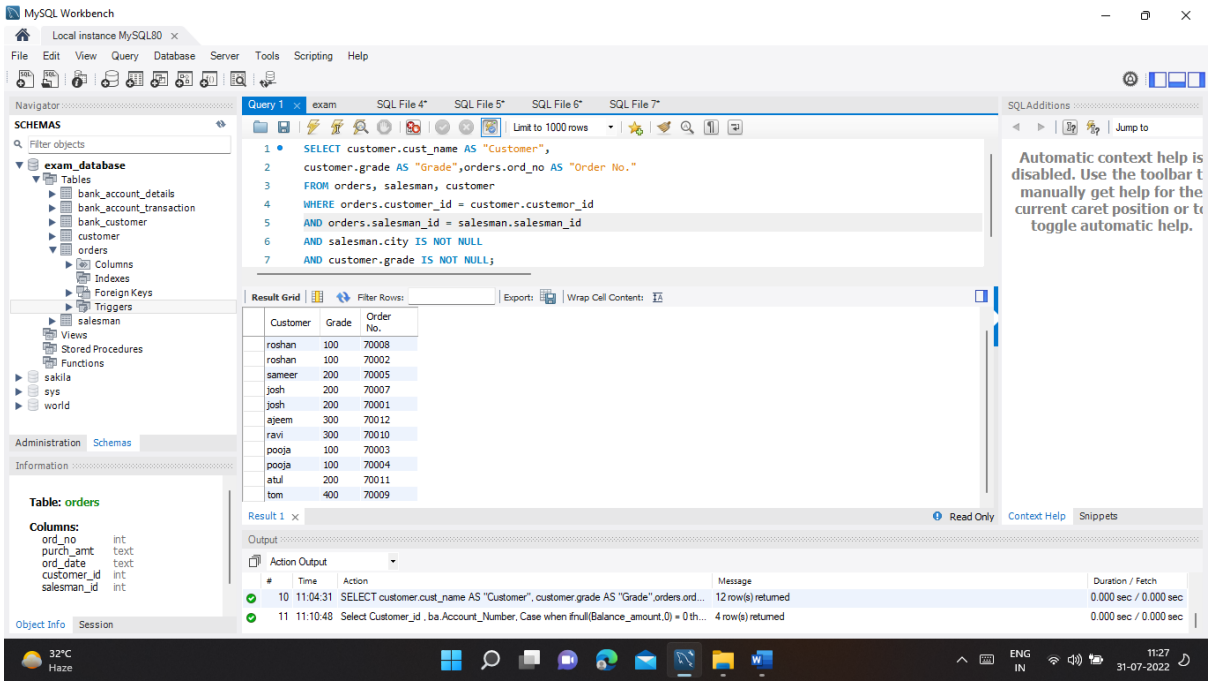
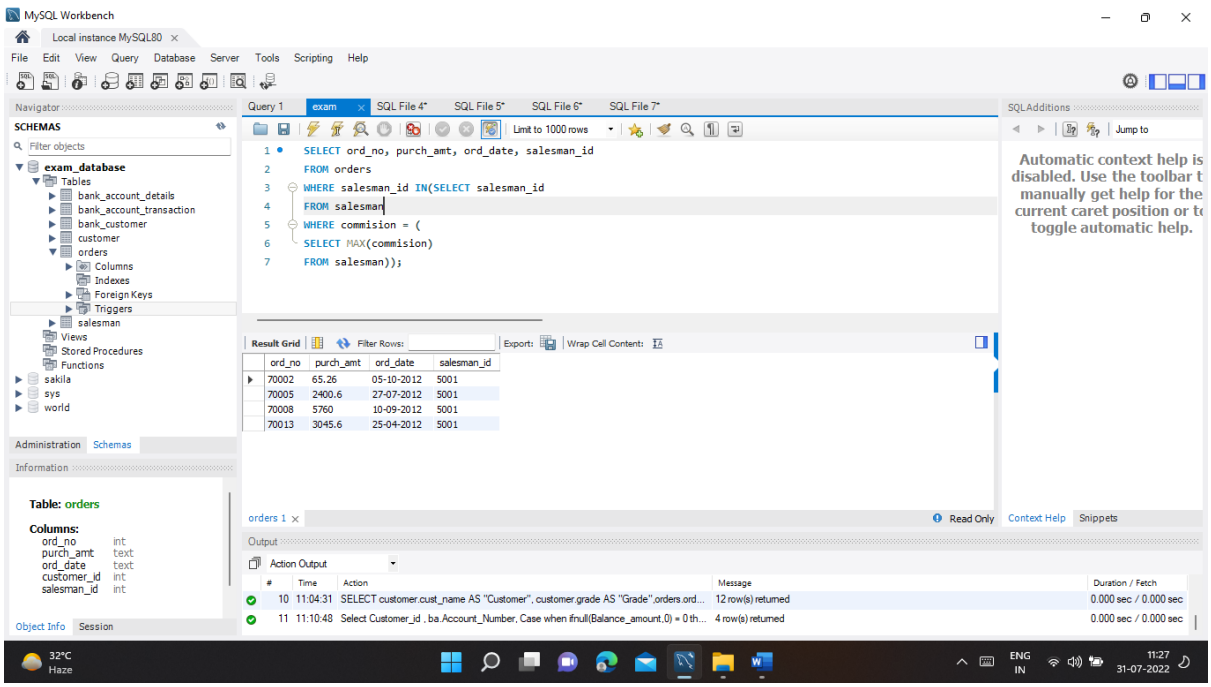
1)


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
SCHEMAS
exam_database
Tables
bank_account_details
bank_account_transaction
bank_customer
customer
orders
Columns
Indexes
Foreign Keys
Triggers
salesman
Views
Stored Procedures
Functions
sakila
sys
world
Query 1
exam
SQL File 4*
SQL File 5*
SQL File 6*
SQL File 7*
SELECT customer.cust_name AS "Customer",
customer.grade AS "Grade",orders.ord_no AS "Order No."
FROM orders, salesman, customer
WHERE orders.customer_id = customer.custemor_id
AND orders.salesman_id = salesman.salesman_id
AND salesman.city IS NOT NULL
AND customer.grade IS NOT NULL;
Result Grid
Customer Grade Order No.
roshan 100 70008
roshan 100 70002
sameer 200 70005
josh 200 70007
josh 200 70001
ajeem 300 70012
ravi 300 70010
pooja 100 70003
pooja 100 70004
atul 200 70011
tom 400 70009
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
11 11:10:48 Select Customer_id , ba.Account_Number, Case when ifnull(Balance_amount,0) = 0 th... 4 row(s) returned 0.000 sec / 0.000 sec
32°C Haze
ENG IN
11:27 31-07-2022

2)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sakila
sys
world
Query 1
exam
SQL File 4*
SQL File 5*
SQL File 6*
SQL File 7*
SELECT ord_no, purch_amt, ord_date, salesman_id
FROM orders
WHERE salesman_id IN(SELECT salesman_id
FROM salesman
WHERE commision = (
SELECT MAX(commision)
FROM salesman));
Result Grid
ord_no purch_amt ord_date salesman_id
70002 65.26 05-10-2012 5001
70005 2400.6 27-07-2012 5001
70008 5760 10-09-2012 5001
70013 3045.6 25-04-2012 5001
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
11 11:10:48 Select Customer_id , ba.Account_Number, Case when ifnull(Balance_amount,0) = 0 th... 4 row(s) returned 0.000 sec / 0.000 sec
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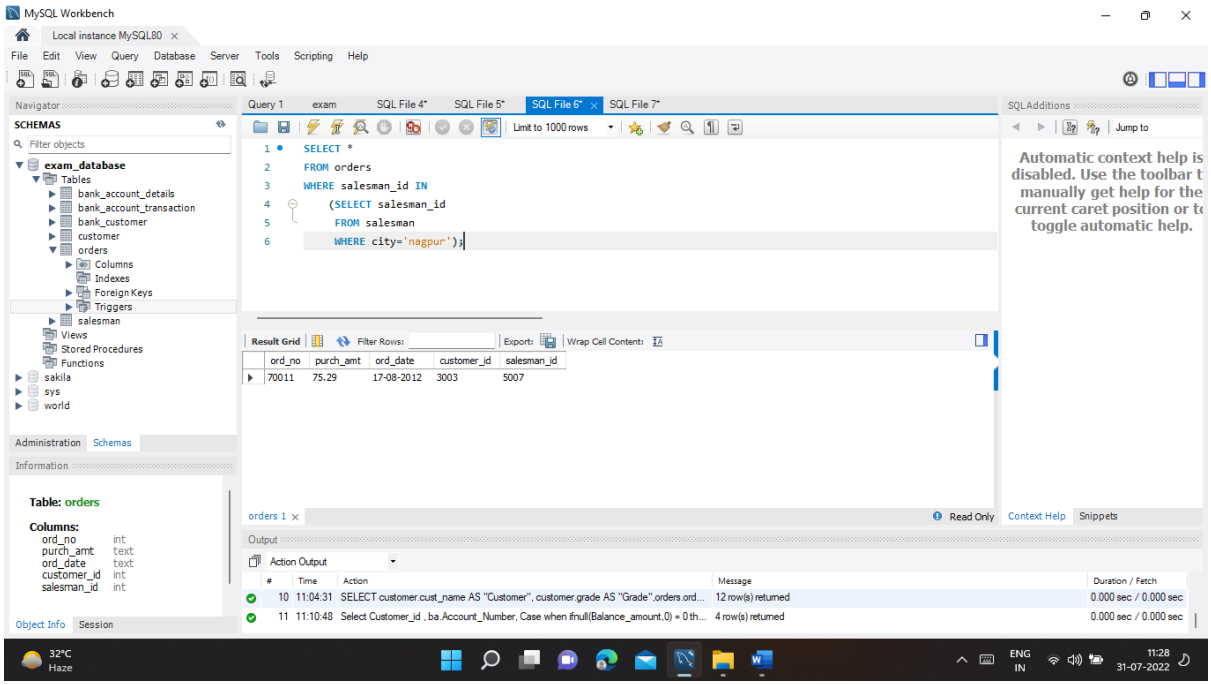
3)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Query 1 exam SQL File 4* SQL File 5* SQL File 6* SQL File 7*
SELECT *
FROM orders
WHERE salesman_id IN
(SELECT salesman_id
FROM salesman
WHERE city='nagpur');
Result Grid
ord_no purch_amt ord_date customer_id salesman_id
70011 75.29 17-08-2012 3003 5007
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
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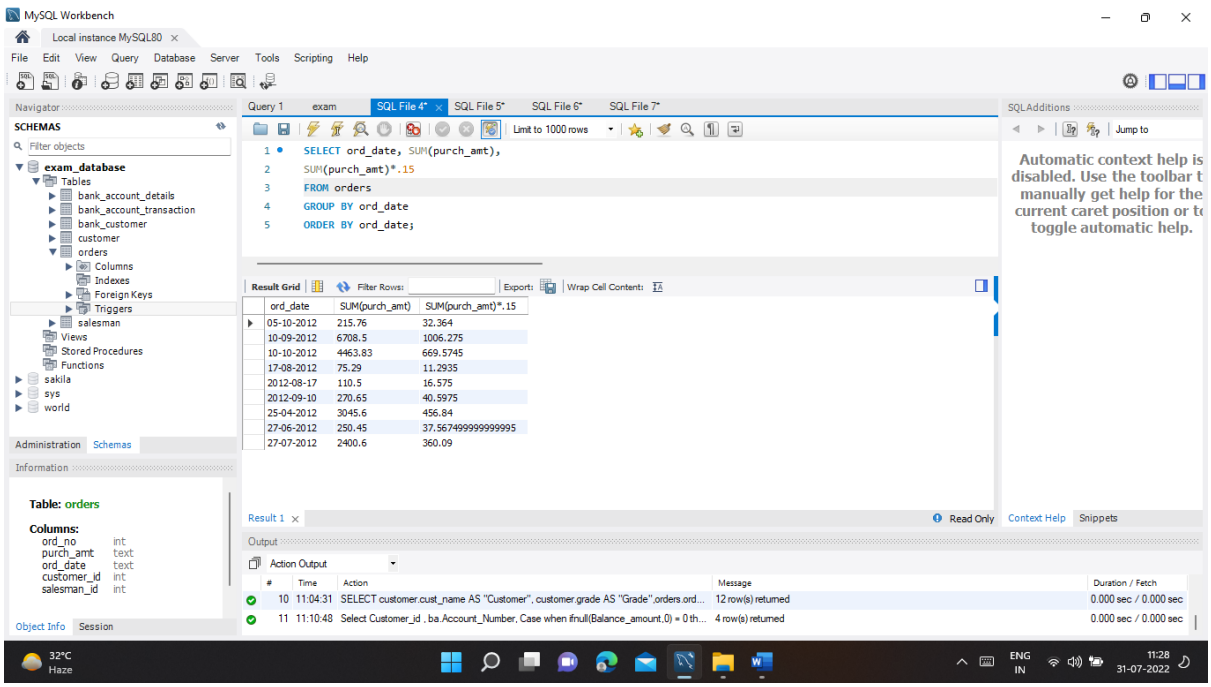
4)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Query 1 exam SQL File 4* SQL File 5* SQL File 6* SQL File 7*
SELECT ord_date, SUM(purch_amt),
SUM(purch_amt)*.15
FROM orders
GROUP BY ord_date
ORDER BY ord_date;
Result Grid
ord_date SUM(purch_amt) SUM(purch_amt)*.15
05-10-2012 215.76 32.364
10-09-2012 6708.5 1006.275
10-10-2012 4463.83 669.5745
17-08-2012 75.29 11.2935
2012-08-17 110.5 16.575
2012-09-10 270.65 40.5975
25-04-2012 3045.6 456.84
27-06-2012 250.45 37.567499999999995
27-07-2012 2400.6 360.09
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
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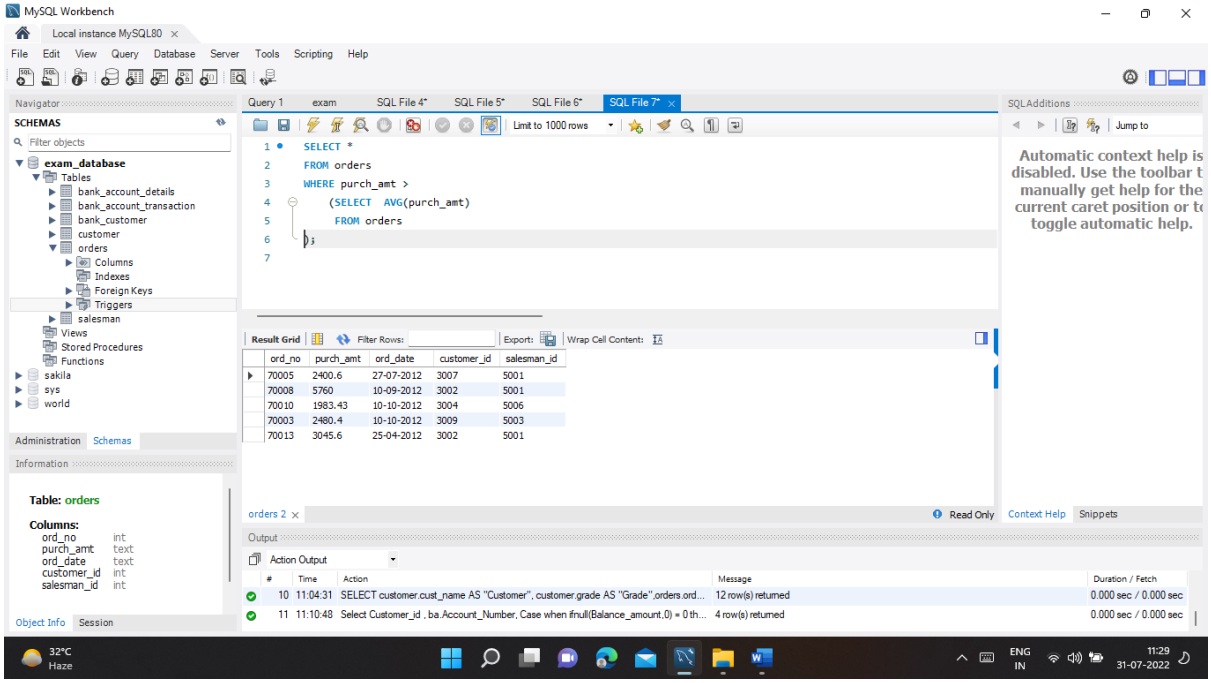
5)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Query 1 exam SQL File 4* SQL File 5* SQL File 6* SQL File 7*
SELECT *
FROM orders
WHERE purch_amt >
(SELECT AVG(purch_amt)
FROM orders
);
Result Grid
ord_no purch_amt ord_date customer_id salesman_id
70005 2400.6 27-07-2012 3007 5001
70008 5760 10-09-2012 3002 5001
70010 1983.43 10-10-2012 3004 5006
70003 2480.4 10-10-2012 3009 5003
70013 3045.6 25-04-2012 3002 5001
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or t toggle automatic help.
Output
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
11 11:10:48 Select Customer_id , ba.Account_Number, Case when ifnull(Balance_amount,0) = 0 th... 4 row(s) returned 0.000 sec / 0.000 sec
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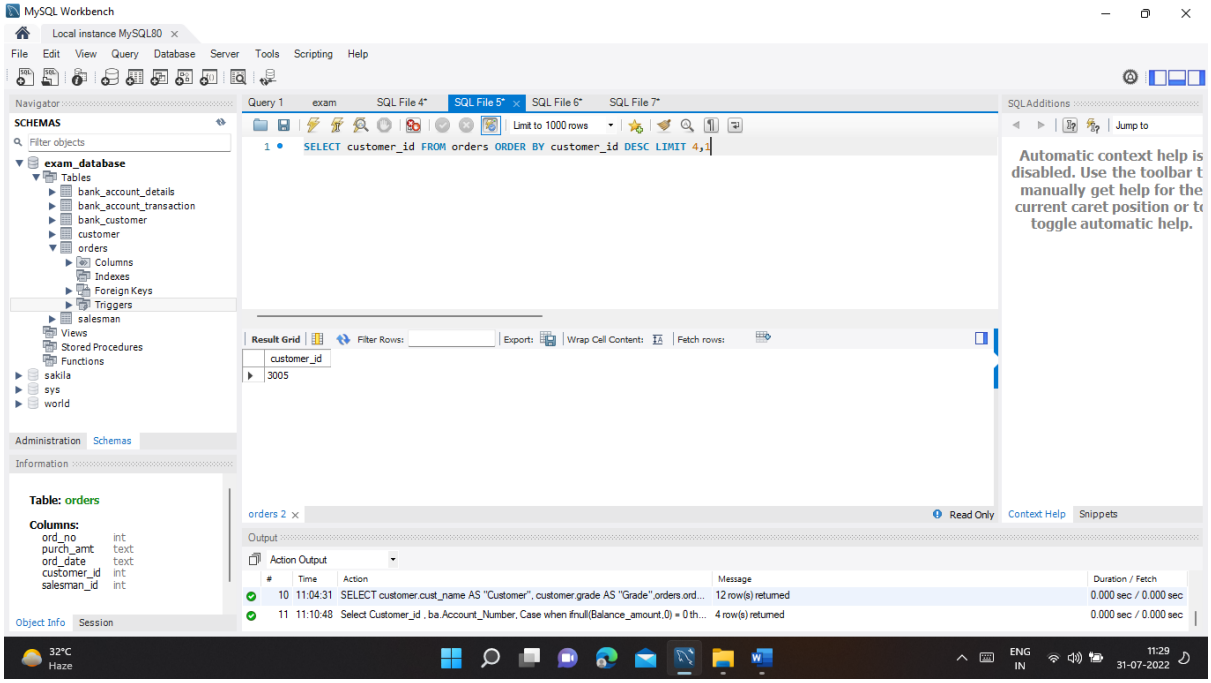
6)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sys
world
Query 1 exam SQL File 4* SQL File 5* SQL File 6* SQL File 7*
SELECT customer_id FROM orders ORDER BY customer_id DESC LIMIT 4,1;
Result Grid
customer_id
3005
Table: orders
Columns:
ord_no int
purch_amt text
ord_date text
customer_id int
salesman_id int
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or t toggle automatic help.
Output
Action Output
10 11:04:31 SELECT customer.cust_name AS "Customer", customer.grade AS "Grade",orders.ord... 12 row(s) returned 0.000 sec / 0.000 sec
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7) **entity** – entity can be real-world object. it is a collection of related attributes or properties.example: employee, department, etc. **Strong Entity** –An entity that has a primary key is called as Strong entity. Rectangle represents strong entity. **Weak Entity** –Weak entity doesn't have sufficient attributes to form a primary key of its own. Double rectangle represents weak entity.

The entity-relationship (ER) model is used to design relational databases by removing all existing redundancy in the data. The basic object of the ER model is an entity—that is, a real-world object. Each entity has several attributes, which are properties of the entity and therefore describe it