Q1.List all agents, in descending order of percentage of confirmed booking each trip in the month of October this year. Include agent and route information in your result.

select a.agent\_id, a.agentname, a.contact\_number, a.address, t.route\_id, count(case when t.status = 'confirm' then 1 end) \* 100.0 / count(\*) AS percentage\_confirmed\_bookings from bookticket t left join agent a on t.agent\_id = a.agent\_id where month(t.journeydate) = 10 and year(t.journeydate) = year(curdate()) and a.agent\_id is not null group by t.agent\_id, a.agentname, a.contact\_number, a.address, t.route\_id ORDER BY percentage\_confirmed\_bookings desc;

+----------+-----------------+----------------+-----------------------+----------+-------------------------------+

| agent\_id | agentname | contact\_number | address | route\_id | percentage\_confirmed\_bookings |

+----------+-----------------+----------------+-----------------------+----------+-------------------------------+

| a11 | Aarush Banerjee | 5554443333 | 567 Pineapple Street | R020 | 100.00000 |

| a14 | Myra Reddy | 2223334444 | 456 Lime Street | R008 | 100.00000 |

| a15 | Kabir Malhotra | 9991112222 | 789 Grape Street | R008 | 100.00000 |

| a16 | Avani Verma | 4442221111 | 234 Banana Street | R001 | 100.00000 |

| a20 | Zara Sharma | 8887776666 | 456 Avocado Street | R008 | 100.00000 |

| a23 | Yuvaan Rana | 2224448888 | 567 Pear Street | R020 | 100.00000 |

| a8 | Saanvi Desai | 6667778888 | 321 Walnut Street | R020 | 100.00000 |

| a17 | Aryan Bhatnagar | 8889990000 | 567 Watermelon Street | R001 | 0.00000 |

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Q2.Display the details of the agents who have made maximum commission in the Month of September.

select a.\* from agent a where month = 'september' and commission =( select max(commission) from agent where month = 'september');

+----------+-------------+----------------+-----------------+-----------+-----------+

| agent\_id | agentname | contact\_number | address | month | commission |

+----------+-------------+----------------+-----------------+-----------+-----------+

| a1 | Aarav Patel | 1234567890 | 123 Main Street | september | 2000 |

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|  |  |  |  |  |  |

Q3. Display the details of the route where a train was always on time.

mysql> select \* from Route r where route\_id not in(select rs.route\_id from RunningSchedule rs where rs.route\_id=r.route\_id and rs.isdelayover30min=1);

+----------+------------------------------+----------+------------------------+----------------------------------------+----------------+----------------+

| route\_id | route\_name | distance | time\_taken | operating\_days | start\_location | end\_location |

+----------+------------------------------+----------+------------------------+----------------------------------------+----------------+----------------+

| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

| R002 | New Delhi - Himachal | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | NewDelhi | Himachal |

| R003 | Secunderabad - Visakhapatnam | 500 | 8 hrs 30 minutes | once a week (every Sunday) | Secunderabad | Visakhapatnam |

| R004 | Mumbai -SainagarShirdi | 248 | 5 hours 20 minutes | 6 days in a week but not on Tuesdays | Mumbai | SainagarShirdi |

| R005 | Mumbai - Solapur | 400 | 6 hours and 35 minutes | 6 days in a week but not on Wednesdays | Mumbai | Solapur |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R007 | Lonavala - Ajmer | 1062 | 10 hours 45 minutes | once a week (every Saturday) | Lonavla | Ajmer |

| R008 | Dharwad - Bengaluru | 432 | 5 hours | Monday,Wednesday and Saturday | Dharwad | Bengaluru |

| R009 | Bhopal - Indore | 246 | 3 hours | Every day | Bhopal | Indore |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R011 | Gandhinagar - Mumbai Central | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Gandhinagar | Mumbai Central |

| R012 | Himachal - New Delhi | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | Himachal | New Delhi |

| R013 | Visakhapatnam - Secunderabad | 500 | 8 hrs 30 minutes | once a week (every Sunday) | Visakhapatnam | Secunderabad |

| R014 | SainagarShirdi - Mumbai | 248 | 5 hours 20 minutes | 6 days in a week but not on Tuesdays | SainagarShirdi | Mumbai |

| R015 | Solapur - Mumbai | 400 | 6 hours and 35 minutes | 6 days in a week but not on Wednesdays | Solapur | Mumbai |

| R016 | Delhi-Bhopal | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Delhi | Bhopal |

| R017 | Ajmer-Lonavala | 1062 | 10 hours 45 minutes | once a week (every Saturday) | Ajmer | Lonavala |

| R018 | Bengaluru-Dharwad | 432 | 5 hours | Monday,Wednesday and Saturday | Bengaluru | Dharwad |

| R019 | Indore-Bhopal | 246 | 3 hours | Every day | Indore | Bhopal |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

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Q4.List all agents’ information with more than 10 confirmed bookings in the month of September this year.

select a.agent\_id,a.agentname, a.contact\_number, a.address, count(bt.ticket\_id) as confirmed\_bookings from agent a join bookticket bt

-> on a.agent\_id = bt.agent\_id where month(bt.bookingdate) = 9 and YEAR(bt.bookingdate) = YEAR(CURRENT\_DATE()) and bt.status = 'confirm' group by a.agent\_id having count(bt.ticket\_id) > 10;

+----------+-------------+----------------+-----------------+--------------------+

| agent\_id | agentname | contact\_number | address | confirmed\_bookings |

+----------+-------------+----------------+-----------------+--------------------+

| a23 | Yuvaan Rana | 2224448888 | 567 Pear Street | 13 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
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Q5. Display the details of the routes where majority of bookings are not made by agents.

select r.\* from Route r ,bookticket where agent\_id!='null' and bookticket.route\_id=r.route\_id;

+----------+-----------------------------+----------+------------------------+---------------------------------------+----------------+--------------+

| route\_id | route\_name | distance | time\_taken | operating\_days | start\_location | end\_location |

+----------+-----------------------------+----------+------------------------+---------------------------------------+----------------+--------------+

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

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| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

| R002 | New Delhi - Himachal | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | NewDelhi | Himachal |

| R002 | New Delhi - Himachal | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | NewDelhi | Himachal |

| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R002 | New Delhi - Himachal | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | NewDelhi | Himachal |

| R009 | Bhopal - Indore | 246 | 3 hours | Every day | Bhopal | Indore |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R006 | Bhopal-Delhi | 700 | 7 hours and 45 minutes | 6 days in a week but not on Saturdays | Bhopal | Delhi |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R001 | Mumbai Central- Gandhinagar | 548 | 5 hours 40 minutes | 6 days a week except Sundays | Mumbai Central | Gandhinagar |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R002 | New Delhi - Himachal | 412 | 6 hours 10 minutes | 6 days a week except Thursdays | NewDelhi | Himachal |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R010 | Mumbai - Goa | 588 | 6 hours | Every day | Mumbai | Goa |

| R008 | Dharwad - Bengaluru | 432 | 5 hours | Monday,Wednesday and Saturday | Dharwad | Bengaluru |

| R008 | Dharwad - Bengaluru | 432 | 5 hours | Monday,Wednesday and Saturday | Dharwad | Bengaluru |

| R008 | Dharwad - Bengaluru | 432 | 5 hours | Monday,Wednesday and Saturday | Dharwad | Bengaluru |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

| R020 | Goa-Mumbai | 588 | 6 hours | Every day | Goa | Mumbai |

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