**Aim: To Execute Subqueries on our Database**

Q1. Show the details of the clerk who has sold the most expensive ticket?

[SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) \* FROM clerk

where id

[in](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/comparison-operators.html#function_in) ([SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) clerk\_id from payment WHERE amount [in](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/comparison-operators.html#function_in)

([select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) [max](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/group-by-functions.html#function_max)(amount)from payment))



Q2. Show the name of passenger and their corresponding seat number with their train name ?

[select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) passenger.name,ticket.seatnumber,train.name

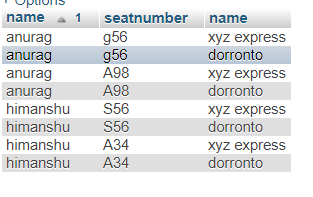
from passenger,ticket,train

WHERE passenger.id = any([select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) passenger\_id from ticket)

[and](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/logical-operators.html#operator_and)

ticket.train\_id =([select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) id from train WHERE id = passenger.id)

ORDER BY passenger.name ASC



Q3. Show the payment of ticket which is greater than the average of all the ticket price?

SELECT \* from payment WHERE amount > (SELECT avg(amount) from payment)



Q4. Show the details of passenger who has booked the ticket which is more expensive than the average ticket price?

[Select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) passenger.name,from\_place,payment.amount,to\_place

from passenger,payment

group by train\_id

having

[avg](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/group-by-functions.html#function_avg)(payment.amount)>=all

([SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) [avg](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/group-by-functions.html" \l "function_avg" \t "mysql_doc)(amount) from payment)



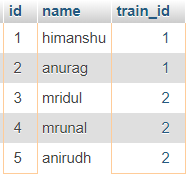
Q5. Show the details of passenger who are travelling from a train ?

[SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) id,name,train\_id from

passenger pa

where Exists

([select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) \* from train where pa.train\_id = id)



Q6. Show 1,2,3,4,5,6,7,8,9,10 ?

[SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) \* from ([select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) 1,2,3,4,5,6,8,9,10) as pvt



Q7. There is a hike of 5% in the amount of ticket sold by clerk name ‘himanshu’?

[UPDATE](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/update.html) payment [set](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/set.html) amount = amount + 0.05\*amount WHERE clerk\_id [in](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/comparison-operators.html#function_in)

([SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) id from clerk where firstname = 'himanshu')

Q8. Show the union operation on any table?

[SELECT](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) \* FROM `clerk` UNION [select](http://localhost:90/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) \* from passenger

