**Instructions:**

Please share your answers filled in line in the Word document. Submit code separately wherever applicable.

Please ensure you update all the details:

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**Topic: Introduction to sql and sql commands**

**What is SQL, and what are some common uses for it in database management?**

ANS ; sql is a Structured Query language is programming language used to communicate with data stored in a rdms. Sql is not a case sensitive language

1. Purpose is storing and managing data in rdms
2. Common uses for database management

Sql helps in data manipulation like creating , updating, altering, deleting etc.

**What is a foreign key in SQL, and how is it used to establish relationships between tables?**

A foreign key is a fundamental concept in relational database design and management. It's a database constraint that establishes a link or relationship between two tables in a relational database. The primary purpose of a foreign key is to maintain referential integrity, ensuring that the data in related tables remains consistent and accurate.

**DATABASE CREATE:-**

1. Create a database ‘classroom’
2. Create a table named ‘science class’ with the following properties

3 columns(enrollment\_no int, name varchar, science\_marks int)

**INSERTING & IMPORTING:-**

1. Insert the following data into science\_class using insert into command

|  |  |  |
| --- | --- | --- |
| 1 | popeye | 33 |
| 2 | olive | 54 |
| 3 | brutus | 98 |

1. **Import data from CSV file ‘student.csv’ attached in resources to science\_class to insert data of next 8 students**

**ANSWER**

create database classroom;

use classroom;

create table science\_class(enrollment\_no int, name varchar(20), science\_marks int);

insert into science\_class values(1, 'popeye', 33),

(2, 'olive', 54), (3, 'brutus', 98);

select \* from science\_class;

show variables like 'secure\_file\_priv';

show variables like '%local%';

# load commmand

LOAD DATA INFILE'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/student.csv'

INTO TABLE science\_class

FIELDS TERMINATED BY ','

ENCLOSED BY '"'

LINES TERMINATED BY '\n'

IGNORE 1 ROWS;

select \* from science\_class;

**SELECT & WHERE:-**

1. **Retrieve all data from the table ‘Science\_Class’**

Ans; select \* from science\_class

1. **Retrieve the name of students who have scored more than 60 marks**

Ans; select \* from science\_class where science\_marks > 60;

Output:-

3 brutus 98

4 Linnett 79

6 Sam 63

7 Zooey 82

8 Robb 97

11 Arya 78

1. **Retrieve all data of students who have scored more than 35 but less than 60 marks**

Answer:

select \* from science\_class where 35< science\_marks and science\_marks < 60;

output:-

2 olive 54

5 Jayden 45

9 Jon 38

10 Sansa 54

1. **Retrieve all other students i.e. who have scored less than or equal to 35 or more than or equal to 60.**

Answer;

select \* from science\_class where 35 >= science\_marks or science\_marks >= 60;

1 popeye 33

3 brutus 98

4 Linnett 79

6 Sam 63

7 Zooey 82

8 Robb 97

11 Arya 78

**UPDATING TABLES:-**

1. **Update the marks of popeye to 45**

Answer;

set sql\_safe\_updates= 0;

update science\_class

set science\_marks = 45

where name = 'popeye' ;

select \* from science\_class ;

output;=

1 popeye 45

1. **Delete the row containing details of the student named ‘robb’**

Answer;

delete from science\_class

where student\_name = 'robb';

1. **Rename column ‘name’ to ‘student\_name’**

Answer;

alter table science\_class rename column name to student\_name;