VISHWA .S LAB ASSESSMENT 1 18.07.24

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Write SQL queries in MySQL for the following.

1. Write an SQL Query to find the year from date.

**Query:** select year(curdate()) as Year;

**Output:** 2024

1. Check whether date passed to Query is the date of a given format or not.

**Query:** select IF(STR\_TO\_DATE('2024-07-20', '%Y-%m-%d') is not NULL, 'Valid', 'Invalid') AS DateValidation;

**Output:** Valid

3.Find the size of the SCHEMA/USER.

**Query:** select table\_schema "Database Name”

SUM(data\_length + index\_length) / 1024 / 1024 "Database Size in MB" from information\_schema.tables

group by table\_schema;

# Output:

|  |  |
| --- | --- |
| Database Name | Database Size in MB |
| mysql | 2.62500000 |
| information\_schema | 0.00000000 |
| performance\_schema | 0.00000000 |
| sys | 0.01562500 |

4.Display the current time.

**Query:** select curtime() as Current\_time;

**Output:** 21:43:00

5.Given a date, retrieve the next day’s date.

**Query:** select date\_add(curdate(),interval 1 day) as Tomorrow;

**Output:** 2024-07-21

6.Get database’s date.

**Query:** select table Records as Database,

table\_name as FirstTable,

create\_time as Date from information\_schema.tables

where table\_schema = 'sample' order by create\_time;

# Output:

|  |  |  |
| --- | --- | --- |
| Database | FirstTable | Date |
| sample | example | 2024-07-21 20:20:51 |
| sample | records | * + 1. 20:12:32 |

7.Return the default(current) database name.

**Query:** select datatbase() AS CurrentDatabase;

**Output:** sample

8.Retrieve the current MySQL user name and host name.

**Query:** select user();

**Output:** root@localhost

9.Find the string that tells the MySQL server version.

**Query:** select version() as Version;

**Output:** 8.1.0

10.Perform Bitwise OR, Bitwise XOR and Bitwise AND.

**Query:** select 3 | 1 AS BitwiseOR, 2 ^ 3 AS BitwiseXOR, 1 & 3 AS Bitwise AND;

**Output:** 2 2 1

11.Find the difference between two dates and print in terms of the number of days.

**Query:** select datediff('2024-07-26', '2024-07-20') AS DateDifference;

# Output: 6

12.Add one day to the current date.

**Query:** select date\_add(curdate(),interval 1 day) as Tomorrow;

**Output:** 2024-07-21

13.Add two hours and 5000 minutes to the current date and print the new date.

**Query:** select date\_add(date\_add(now(), interval 2 hour),interval 5000 minute) AS New\_Date;

**Output:** 2024-07-31 04:19:32

14.Find the floor and ceil values of a floating point number. Also operate on the power, log, modulus, round off and truncate functions.

**Query:** select floor(11.66) AS FloorValue, ceil(11.66) AS CeilValue, power(3, 3) AS PowerValue, log(8) AS LogValue, mod(17, 4) AS

ModulusValue, round(13.828, 2) AS RoundedValue, truncate(13.828, 2) AS TruncatedValue;

**Output:** 11 | 12 | 27 | 0.903089987 | 1 | 13.83 | 13.82

* 1. Compare two strings and print the value ‘yes’ if they are equal, else print ‘no’.

**Query:** select IF('STRING1' = 'STRING2', 'yes', 'no') AS StringComparison;

**Output:** yes

* 1. Simulate the “IF... ELSE” construct in MySQL for a mark and grade setup.

**Query:** select student\_id, marks, CASE

WHEN marks >= 90 THEN 'S' WHEN marks >= 80 THEN 'A' WHEN marks >= 70 THEN 'B' WHEN marks >= 60 THEN 'D' ELSE 'F'

END AS Grade FROM students;

|  |  |  |
| --- | --- | --- |
| **Output:**  **student\_id** | **marks** | **Grade** |
| 1 | 90 | A |
| 2 | 89 | B |
| 3 | 71 | C |

* 1. Use IFNULL to check whether a mathematical expression gives a NULL value or not.

**Query:** select IFNULL(NULL, 'Expression is NULL') AS NullCheck;

**Output:** Expression is NULL