INDIAN SCHOOL AL WADI AL KABIR

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| **Class: 12th (CS)** | **Department: Computer Science** | **Date of submission:**  **04.09.23** |
| **Worksheet No: 0 6** | **Topic: Database concepts and MYSQL** | **Note: To be written in Notebook** |

1. Give the full form for the following: SQL, RDBMS, DDL, DML
2. What is a relation?
3. Explain tuples and attributes with an appropriate example.
4. Define the following with examples:
   1. primary key
   2. Candidate key
   3. Alternate key.
5. A table employee has 5 rows and 6 columns. What is the cardinality and degree of the table?
6. What are constraints? Name the different constraints used while creating a table.
7. Rahul has applied a Constraint on a column(field) such that Ajay will certainly have to insert a value in this field, when he inserts a new row in the table. Which constraint has Ajay used?
8. A table student has Roll\_no as one column. While entering the details, Smitha is not able to enter duplicate values. What constraint has she given while creating the table?
9. Write a SQL statements for the following:
10. To create a database company
11. To see all the existing databases
12. To open the existing database company.
13. To list the tables in company database
14. Create the table medicine with the following structure:

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Data Limit** | **Constraint** |
| MEDID | int | 5 | PRIMARY KEY |
| MEDNAME | varchar | 25 | UNIQUE |
| EXPDATE | Date |  |  |
| MEDTYPE | varchar | 15 | NOT NULL |
| RATE | int | 5 |  |
| QUANTITY | int | 4 |  |

1. a. Write command to display the structure of the above table.

b. Write command to insert a record in to the above table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| MEDID | MEDNAME | EXPDATE | MEDTYPE | RATE | QUANTITY |
| 010 | Panadol | 12/12/22 | Adult | 90 | 12 |
| 011 | Calpol | 23/5/25 | Infant | 50 | 20 |

1. Table library has the following data: TABLE: LIBRARY

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BNO** | **BTITLE** | **BPUB** | **ISSUEDATE** | **PRICE** |
| 4002 | C++ | VIKAS PUB | 03-NOV-2002 | 485 |
| 4072 | JAVA | TATA MCGRAW HILL | 23-JUN-1997 | 750 |
| 3789 | VB | GALGOTIA PUB | 12-SEP-2004 | 400 |
| 4821 | ASP | TATA MCGRAW HILL | 17-MAY-2013 | 275 |
| 2901 | PERL | GALGOTIA PUB | 21-APR-2012 | 600 |
| 3285 | SQL | VIKAS PUB | 15-DEC-2005 | 180 |
| 5674 | NETWORK | HASSAN PUB | 04-JAN-1989 | 1250 |
| 7200 | OS | TATA MCGRAW HILL | 10-AUG-2008 | 370 |
| 1579 | LINUX | JEEVAN PUB | 23-SEP-2011 | 860 |
| 9278 | WINDOWS | GALGOTIA PUB | 18-OCT-2003 | 220 |
| 5729 | SYBASE | GALGOTIA PUB | 06-JAN-2012 | NULL |
| 8005 | MYSQL | VIKAS PUB | 28-MAR-1999 | 510 |
| 1058 | MS OFFICE | TATA MCGRAW HILL | 12-NOV-2001 | NULL |
| 1685 | INTRANET | VIKAS PUB | 15-MAR-2010 | 220 |

1. Write SQL queries for the following:
   1. Display the details of Books from TATA MCGRAW HILL publication.
   2. Display the Details of the Books whose Price is not given.
   3. Display the details of books of the Publisher “GALGOTIA PUB’ with price more than 500
   4. Display the Book Name & Issue Date of the Books with the price more than 800.
   5. Display the details of the books with Issue Date Before ’01-OCT-2006’.
   6. Display the details of the Books not Published by “VIKAS PUB”.
   7. Display the details of the Books “LINUX”, “MYSQL” & “ASP”.
   8. Display the book names which are neither published by galgotia pub nor by vikas pub
   9. Display the details of BNO for books issued after 10th August 2002.
2. Find the output of the following:
   1. SELECT BTITLE , PRICE FROM LIBRARY WHERE BPUB = “GALGOTIA PUB”;
   2. SELECT DISTINCT BPUB FROM LIBRARY;
   3. SELECT BTITLE , BPUB FROM LIBRARY WHERE PRICE > 250 AND BPUB =”TATA MCGRAW HILL”;