

TO BE DONE:

1. create a database called '**assignment**' (Note please do the assignment tasks in this database)

2. Create the tables from ConsolidatedTables.sql and enter the records as specified in it.

3. Create a table called **countries** with the following columns
name, population, capital

- choose appropriate datatypes for the columns

a) Insert the following data into the table

China	1382	Beijing
India	1326	Delhi
United States	324	Washington D.C.
Indonesia	260	Jakarta
Brazil	209	Brasilia
Pakistan	193	Islamabad
Nigeria	187	Abuja
Bangladesh	163	Dhaka
Russia	143	Moscow
Mexico	128	Mexico City
Japan	126	Tokyo
Philippines	102	Manila
Ethiopia	101	Addis Ababa
Vietnam	94	Hanoi
Egypt	93	Cairo
Germany	81	Berlin
Iran	80	Tehran
Turkey	79	Ankara
Congo	79	Kinshasa
France	64	Paris
United Kingdom	65	London
Italy	60	Rome
South Africa	55	Pretoria
Myanmar	54	Naypyidaw

b) Add a couple of countries of your choice

c) Change 'Delhi' to 'New Delhi'

4. Rename the table countries to big_countries .

5. Create the following tables. Use auto increment wherever applicable

a. Product

product_id - primary key

product_name - cannot be null and only unique values are allowed

description

supplier_id - foreign key of supplier table

b. Suppliers

supplier_id - primary key

supplier_name

location

c. Stock

id - primary key

product_id - foreign key of product table

balance_stock

6. Enter some records into the three tables.

7. Modify the supplier table to make supplier name unique and not null.

8. Modify the emp table as follows

a. Add a column called deptno

b. Set the value of deptno in the following order

deptno = 20 where emp_id is divisible by 2

deptno = 30 where emp_id is divisible by 3

deptno = 40 where emp_id is divisible by 4

deptno = 50 where emp_id is divisible by 5

deptno = 10 for the remaining records.

9. Create a unique index on the emp_id column.

10. Create a view called **emp_sal** on the **emp** table by selecting the following fields in the order of highest salary to the lowest salary.

emp_no, first_name, last_name, salary

11. select all employees in department 10 whose salary is greater than 3000. [table: employee]

12. The grading of students based on the marks they have obtained is done as follows:

40 to 50 -> Second Class

50 to 60 -> First Class

60 to 80 -> First Class

80 to 100 -> Distinctions

a. How many students have graduated with first class?

b. How many students have obtained distinction? [table: students]

13. Get a list of city names from station with even ID numbers only. Exclude duplicates from your answer.[table: station]

14. Find the difference between the total number of city entries in the table and the number of distinct city entries in the table. In other words, if N is the number of city entries in station, and N1 is the number of distinct city names in station, write a query to find the value of N-N1 from station.

[table: station]

15. Answer the following

a. Query the list of CITY names starting with vowels (i.e., a, e, i, o, or u) from STATION. Your result cannot contain duplicates. [Hint: Use RIGHT() / LEFT() methods]

b. Query the list of CITY names from STATION which have vowels (i.e., a, e, i, o, and u) as both their first and last characters. Your result cannot contain duplicates.

c. Query the list of CITY names from STATION that do not start with vowels. Your result cannot contain duplicates.

d. Query the list of CITY names from STATION that either do not start with vowels or do not end with vowels. Your result cannot contain duplicates. [table: station]

16. Write a query that prints a list of employee names having a salary greater than \$2000 per month who have been employed for less than 36 months. Sort your result by descending order of salary. [table: emp]

17. How much money does the company spend every month on salaries for each department? [table: employee]

Expected Result

```
+-----+-----+
| deptno | total_salary |
+-----+-----+
| 10 | 20700.00 |
| 20 | 12300.00 |
| 30 | 1675.00 |
+-----+-----+
```

3 rows in set (0.002 sec)

18. Write a stored procedure that accepts the month and year as inputs and prints the ordernumber, orderdate and status of the orders placed in that month.

Example: call order_status(2005, 11);

19. Write a stored procedure to insert a record into the cancellations table for all cancelled orders.

STEPS:

a. Create a table called cancellations with the following fields

id (primary key),
customernumber (foreign key - Table customers),
ordernumber (foreign key - Table Orders),
comments

All values except id should be taken from the order table.

b. Read through the orders table . If an order is cancelled, then put an entry in the cancellations table.

20. a. Write function that takes the customernumber as input and returns the purchase_status based on the following criteria . [table:Payments]

if the total purchase amount for the customer is < 25000 status = Silver, amount between 25000 and 50000, status = Gold
if amount > 50000 Platinum

b. Write a query that displays customerNumber, customername and purchase_status from customers table.

21. Replicate the functionality of 'on delete cascade' and 'on update cascade' using triggers on movies and rentals tables. Note: Both tables - movies and rentals - don't have primary or foreign keys. Use only triggers to implement the above.

22. Select the first name of the employee who gets the third highest salary. [table: employee]

23. Assign a rank to each employee based on their salary. The person having the highest salary has rank 1. [table: employee]