

1. Create Database Student details.

Name	Null	Type
Student name	Yes	Varchar(10)
Reg no	Yes	Int(10)
Class	Yes	Number(10)
Major	yes	Varchar(15)

a) Create a student table;

Name	Null	Type
Course name	Yes	Varchar(20)
Course no	Yes	Varchar(20)
Credits hrs	Yes	Int(2)
Department	Yes	Varchar(20)

b)Create a Course table;

Name	Null	Type
Sec	Yes	Int(5)
Couse Number	Yes	Varchar(20)
Year	Yes	Int(5)
Institutor	Yes	Varchar(20)

c)Create a Section table;

Name	Null	Yes
Reg No	Yes	Int(5)
Sec	Yes	Int(5)
Grade	Yes	Varchar(20)

d) Create Section Grade table.

f) Alter table section Add new fied"Hours" and update the record.

e)Delete rows from grade report.

g) Drop the table section.

2. Create Database Employee details.

Field	Type
Employees_id	Int(5)
Employee _name	Varchar(20)
Employee Address	Varchar(20)
Employee _age	Int(5)

Create an Employee table

Field	Type
Employees_id	Int(5)
Employee _salary	Int(15)
Employee benefits	Int(10)
Description	Varchar(15)

1. Create an Employee table
2. Arrange the age of employee in ascending order wise.
3. Alter the table employees add new field "country" Add update the record
4. Select employee id, and salary from salary table where salary is above 20000
5. Display Employee_id and total Employee salary table
6. Select country name from employee table country name should be begin with letter "I"
7. Display employee_id, employee description of employee whose salary is greater than 10000 less than 30000.
8. Find DA from Employee salary Table.
9. Find HRA from Employee salary Table.
10. Find PF from Employee salary Table.
11. Find IT from Employee salary Table.

3. Numeric and Character Functions

- 1) Find the Mod of 175.16
- 2) Find the Square root of 25
- 3) Truncate the value 129.3285 to 3 to display as truncate.
- 4) Round the value 92.7689 to 2
- 5) Convert the string College to uppercase.
- 6) Convert the string COLLEGE to lowercase.
- 7) Convert the string college into both uppercase and lowercase.
- 8) Combine your first name and last name under the title full name.
- 9) Find the length of the string "Vikramsarabai".
- 10) Display the substring "BASE" from "DATABASE"
- 11) Replace the string jss with iss
- 12) Find the ASCII value of A.
- 13) Display the current Date.
- 14) Display the current Date.
- 15) Display the current time.
- 16) Display the current time.
- 17) Display the Day.
- 18) Display the Month.
- 19) Display date of the system
- 20) Take a string length maximum of 10 display your name to the left. The remaining space should be filled by '*'.
- 21) Take a string length maximum of 10 display your name to the Right. The remaining space should be filled by '*'.

4. Relational Algebra Operations.

Name	Type
Reg no	Varchar(15)
Name	Varchar(10)
Year	Int(2)
Comb	Varchar(5)

- 1) Create a table Computer science

Name	Type
Reg no	Varchar(15)
Name	Varchar(10)
Year	Int(2)
Comb	Varchar(5)

- 2) Create a table Physics.
- 3) Do union of both table computer science and physics.
- 4) Do union of all table computer science and physics.
- 5) Physics combination is not in computer science combination.
- 6) Physics combination is in computer science combination.
- 7) Union of both tables where year=2.
- 8) Union all of both tables where comb='pmcs'
- 9) Computer science in physics year.
- 10) Union all both tables where year=1.
- 11) Union all both tables where comb=pcs,
- 12) Rename table computer science in CS.

5. Railway Reservation System.

Field	Type	Null	Default
Train _No	Varchar(10)	Yes	Null
Class	Varchar(10)	Yes	Null
Start place	Varchar(10)	Yes	Null
Destination	Varchar(10)	Yes	Null
Seats	Int(3)	Yes	Null

- 1) Create railway availability table;
- 2) Create View to display Train No, Start place and Destination from table

Field	Type	Null
Train no	Varchar(10)	Yes
Start place	Varchar(10)	Yes
Destination	Varchar(10)	Yes

- 3) Create railway Description sleeper table;
- 4) Insert row into sleepview housing values (RDEOS, Mysore, and Bangalore)
- 5) Update from sleeper view destination=mandya where train no=RDEOS.
- 6) Delete row from sleeper.
- 7) Count total No of seats available in availability table.
- 8) Rename view sleeper-to-sleeper class.
- 9) Delete Sleeper view.
- 10) Drop Sleeper view

7. Create Lab Database

Field	Type
No	Int(10)
Item Name	Char(10)
Cost per item	Int(15)
Quantity	Int(10)
DOP	Date
Warranty	Int(10)

1. Create Equipment Table
2. To select the item Name Purchase after 26/07/2021
3. Extend the warranty of each item by 6 item
4. To list the item name in ascending order of the date of purchase where quantity is > 3
5. To count the number average of cost per item of items purchased before 26/07/2021
6. To display the minimum ,maximum, warranty period

6. Create a Database Bank System

Field	Type	Null
Account No	Varchar(20)	Yes
Customer Name	Varchar(20)	Yes
Branch Id	Varchar(20)	Yes

1. Create Account Table

Field	Type	Null
Account No	Varchar(20)	Yes
Branch id	Varchar(20)	Yes
Balance	Int(7)	Yes

2. Create Depositor Table

Field	Type	Null
Branch Id	Varchar(20)	Yes
Branch Name	char(20)	Yes
Branch City	Char(20)	Yes

3. Create Branch Table

Field	Type	Null
Account No	Varchar(20)	Yes
Branch Id	Varchar(20)	Yes
Balance	Int(10)	Yes

4. Create Loan Table

5. Display total number of accounts present in each branch
6. Display total Loan amount in each branch.
7. Display total deposited amount in each branch by descending order.
8. Display total deposited amount in each branch by ascending order.
9. Display Maximum, Minimum loan amount present in each city.
10. Display average amount deposited in each branch each city.
11. Display total number of accounts present in each city.
12. Display all customer details in ascending order of branched from table account
13. Display all customer details in descending order of branched from table account.

