

## Output

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	empno	empname	empaddress	deptno
1	1	Ram	Kathmandu	10

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	rollno	firstname	lastname	address	phoneno	obtained_marks	result
1	1	Suman	NULL	NULL	9812345678	85	PASS

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	acno	custid	type	branch	balance
1	101	1	Saving	Kathmandu	5000
2	102	2	Current	Pokhara	12000

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	acno	custid	type	branch	balance
1	101	1	Saving	Kathmandu	6000
2	101	1	Saving	Kathmandu	6000
3	103	3	Saving	Butwal	8000
4	102	2	Current	Pokhara	12000
5	102	2	Current	Pokhara	12000

	acno	custid	type	branch	balance
1	102	2	Current	Pokhara	12000
2	102	2	Current	Pokhara	12000
3	101	1	Saving	Kathmandu	6000
4	101	1	Saving	Kathmandu	6000
5	103	3	Saving	Butwal	8000

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	Total_Accounts	Total_Balance	Avg_Balance	Max_Balance	Min_Balance
1	5	44000	8800	12000	6000

Click to select the whole column

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	address	Total_Marks
1	Butwal	60
2	Kathmandu	75

	address	Total_Students
1	Butwal	1
2	Kathmandu	1

	address	Total_Students
1	Butwal	1
2	Kathmandu	1

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	department	Total_Salary
1	Finance	8000
2	HR	12500
3	IT	11000

	department	Salary_Count
1	Finance	1
2	HR	2
3	IT	2

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	empid	empname	designation	salary	deptno
1	1	Manjil	Manager	8000	10

	empname	designation	salary
1	Tina	Clerk	4000
2	Tom	Clerk	6000

	empname
1	Tom
2	Ram
3	Shyam

	empid	empname	designation	salary	deptno
1	2	Tina	Clerk	4000	20
2	3	Tom	Clerk	6000	10
3	4	Ram	DGM	12000	30
4	5	Shyam	Clerk	3000	20

Results Messages

	empname
1	Tom

Results Messages

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	empname	salary
1	Sita	6000

	empname	salary	deptno
1	Ram	4000	d101

Results Messages

16

	empname	salary
1	Shyam	8000
2	Sita	6000
3	Gita	12000

	empname	salary
1	Ram	4000
2	Hari	3000

Results Messages

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	sid	nname	rollno	sum	marks
1	1	Ram	101	50	10
2	2	Sita	102	60	20
3	3	Gita	103	40	15
4	4	Hari	104	70	25
5	5	Shyam	105	80	30

A Lab Report On  
Database management system  
**Faculty of Humanities and Social Science**  
**Tribhuvan University**



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**Department of Bachelor of Computer Application (BCA 4th Semester)**  
**Southwestern State College**

In the partial fulfilment of the requirements of the degree of Bachelor of Computer Application  
(BCA 4th Semester)

Basundhara, Kathmandu

## Table of content

### Database Fundamentals

- 1 – Create database "collage"
- 2 – Create schemas BCA and BIM
- 3 – Create table Student in default, BIM, and BCA schemas
- 4 – DDL Operations (Create, Drop, Alter, Rename, Truncate) on Employee table
- 5 – DML Operations (Insert, Select, Update, Delete) on Employee table
- 6 – Create Student table with constraints (NOT NULL, UNIQUE, CHECK, DEFAULT)
- 7 – Create Employee and Department tables with PRIMARY KEY and FOREIGN KEY
- 8 – Advanced Table Operations (Drop table/database/constraint, Add/Drop/Alter columns, Modify datatype)

### Advanced Queries and Joins

- 9 – Create "Account" table and perform DML operations
- 10 – Order data using ORDER BY clause
- 11 – Aggregate functions
- 12 – Student table: Group By and Filtering queries
- 13 – Employee table: Group By and Conditional queries
- 14 – Joins (Inner, Outer, Cross)
- 15 – Nested Queries (Subqueries) on employee\_detail table
- 16 – Set Comparison between employee\_detail and department tables
- 17 – VIEW: Create and use views on Employee table

### Stored Procedures, Triggers, and Indexes

- 18 – Stored Procedures on STUDENT table (Create, Display, Delete, Update, Modify, List, Encryption, Parameters)
- 19 – Return data from stored procedures (Result sets, Output parameters, Return codes)

- 20 – Triggers (DDL and DML Triggers)
- 21 – Trigger to auto-update sum on insert (Enable/Disable trigger)
- 22 – Multirow Enabled Row Trigger
- 23 – Indexes (Clustered, Non-clustered, Filtered, Alter/Drop)