

LAB 03:

STUDENT Table;

Snum	Name	Name	Level	Age
101	Susan Gurung	Software	Bachelor	24
102	Sam KC	Computer	Bachelor	23
103	Hari Rai	Electronics	Masters	25
104	Gopal Shrestha	Software	Bachelor	26

CLASS Table;

Name	Time	Room	Fid
C++	M9-10	R3	F501
MATHS	M8-9	R4	F505
C++	E5-6	R7	F501
PHYSICS	E5-6	R6	F508

ENROLLED Table;

Snum	Classname
101	C++
102	C++
103	PHYSICS
104	MATHS

FACULTY Table;

Fid	Name	Dept
F501	B.Shrestha	Computer
F505	R.Thapa	Maths
F508	S.Tamrakar	Computer
F509	P.Acharya	Science

1. Find the names of all Software Majors (Major = "Software").

```
MariaDB [collmgmtsys]> select * from student
```

```
-> where Major = 'Software';
```

```
+-----+-----+-----+-----+-----+
| Snum | Name      | Major | Level | Age |
+-----+-----+-----+-----+-----+
| 101 | Susan Gurung | Software | Bachelor | 24 |
| 104 | Gopal Shrestha | Software | Bachelor | 26 |
+-----+-----+-----+-----+-----+
```

```
2 rows in set (0.000 sec)
```

2. Retrieve the list of names, age and major of all the students.

```
MariaDB [collmgmtsys]> select Name, Age, Major from student;
```

```
+-----+-----+-----+
| Name      | Age | Major |
+-----+-----+-----+
| Susan Gurung | 24 | Software |
| Sam KC      | 23 | Computer |
| Hari Rai    | 25 | Electronic |
| Gopal Shrestha | 26 | Software |
+-----+-----+-----+
```

```
4 rows in set (0.000 sec)
```

3. Find the names of all Software Majors (Major = "Software") who are aged more than 25.

```
MariaDB [collmgmtsys]> select * from student
```

```
-> where Major='Software' AND Age > 25;
```

```
+-----+-----+-----+-----+-----+
| Snum | Name      | Major  | Level  | Age |
+-----+-----+-----+-----+-----+
| 104 | Gopal Shrestha | Software | Bachelor | 26 |
+-----+-----+-----+-----+-----+
```

```
1 row in set (0.000 sec)
```

4. Find all the students whose name start with 'S'.

```
MariaDB [collmgmtsys]> select * from student
```

```
-> where Name Like 'S%';
```

```
+-----+-----+-----+-----+-----+
| Snum | Name      | Major  | Level  | Age |
+-----+-----+-----+-----+-----+
| 101 | Susan Gurung | Software | Bachelor | 24 |
| 102 | Sam KC      | Computer | Bachelor | 23 |
+-----+-----+-----+-----+-----+
```

```
2 rows in set (0.000 sec)
```

5. Find the names of all faculties having 'T' as the initial of the surnames.

```
MariaDB [collmgmtsys]> select * from faculty
```

```
-> where Name LIKE '__T%';
```

```
+-----+-----+-----+
| Fid | Name      | Dept  |
+-----+-----+-----+
| F505 | R.Thapa   | Maths |
| F508 | S.Tamrakar | Computer |
+-----+-----+-----+
2 rows in set (0.000 sec)
```

6. List all the subject names and the room they are taught in at 5-6 of Evening time.

```
MariaDB [collmgmtsys]> select * from class
```

```
-> where Time='E5-6';
```

```
+-----+-----+-----+-----+
| Name  | Time | Room | Fid |
+-----+-----+-----+-----+
| C++   | E5-6 | R7   | F501 |
| PHYSICS | E5-6 | R6   | F508 |
+-----+-----+-----+-----+
2 rows in set (0.001 sec)
```

7. Display all the faculty information sorted in an ascending order based on Department and sort by Fid when repetition occurs.

```
MariaDB [collmgmtsys]> select * from faculty
```

```
-> order by Dept ASC , Fid ASC;
```

```
+-----+-----+-----+
| Fid | Name      | Dept  |
+-----+-----+-----+
| F501 | B.Shrestha | Computer |
| F508 | S.Tamrakar | Computer |
| F505 | R.Thapa    | Maths    |
| F509 | P.Acharya  | Science  |
+-----+-----+-----+
```

```
4 rows in set (0.000 sec)
```

8. Find the names of all classes that either meet in room R3 or are taught by "B.Shrestha ". (hard-coded)

```
MariaDB [collmgmtsys]> select class.name from class,faculty
```

```
-> where class.fid = faculty.fid AND ( class.Room = 'R3' OR faculty.Name = 'B.Shrestha');
```

```
+-----+
| name |
+-----+
| C++  |
```

```
| C++ |
```

```
+-----+
```

```
2 rows in set (0.000 sec)
```

```
MariaDB [collmgmtsys]> select * from class,faculty
```

```
-> where class.fid = faculty.fid AND ( class.Room = 'R3' OR faculty.Name =  
'B.Shrestha');
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| Name | Time | Room | Fid | Fid | Name | Dept |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| C++ | M9-10 | R3 | F501 | F501 | B.Shrestha | Computer |
```

```
| C++ | E5-6 | R7 | F501 | F501 | B.Shrestha | Computer |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
2 rows in set (0.000 sec)
```

9. Find the names of all students who are enrolled in some class together (C++).

```
MariaDB [collmgmtsys]> select student.name from student,enrolled
```

```
-> where student.Snum = enrolled.Snum AND enrolled.Classname = 'C++';
```

```
+-----+
```

```
| name |
```

```
+-----+
```

```
| Susan Gurung |
```

```
| Sam KC |
```

```
+-----+
```

2 rows in set (0.000 sec)

10. Find the names of faculty members who are from Computer department.

```
MariaDB [collmgmtsys]> select Name from faculty
```

```
-> where Dept ='Computer';
```

```
+-----+
```

```
| Name    |
```

```
+-----+
```

```
| B.Shrestha |
```

```
| S.Tamrakar |
```

```
+-----+
```

2 rows in set (0.000 sec)

11. Find the names as well as department name of faculty members who teaches at 5-6 of Evening time.

```
MariaDB [collmgmtsys]> select faculty.Name , faculty.Dept from faculty ,class
```

```
-> where faculty.fid = class.fid AND Time = 'E5-6';
```

```
+-----+-----+
```

```
| Name    | Dept  |
```

```
+-----+-----+
```

```
| B.Shrestha | Computer |
```

```
| S.Tamrakar | Computer |
```

```
+-----+-----+
```

2 rows in set (0.000 sec)

12. Display the average age of students as 'Average Age' of Bachelors level.

13. Find the Classname in which Sam KC is enrolled in.

```
MariaDB [collmgmtsys]> select enrolled.Classname from enrolled , student
```

```
-> where enrolled.Snum = student.Snum AND student.Name = 'Sam KC';
```

```
+-----+
```

```
| Classname |
```

```
+-----+
```

```
| C++      |
```

```
+-----+
```

1 row in set (0.009 sec)

14. Find the names of all students who are not enrolled in any class taught by "B.Shrestha ".

```
MariaDB [collmgmtsys]> select student.Name from student,class,enrolled,faculty
```

```
-> where faculty.fid = class.fid AND class.Name = enrolled.Classname AND  
enrolled.Snum = student.Snum AND faculty.Name != 'B.Shrestha';
```

```
+-----+
```

```
| Name      |
```


+-----+

| Hari Rai |

| Gopal Shrestha |

+-----+

2 rows in set (0.001 sec)

15. Change the timing of C++ class of Room 3 to morning 7-8.

MariaDB [(none)]> use collmgmtsys;

Database changed

MariaDB [collmgmtsys]> update class

-> set Time = 'M7-8'

-> where Room = 'R3';

Query OK, 1 row affected (0.041 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [collmgmtsys]> select * from class;

+-----+-----+-----+-----+

| Name | Time | Room | Fid |

+-----+-----+-----+-----+

| C++ | M7-8 | R3 | F501 |

| MATHS | M8-9 | R4 | F505 |

| C++ | E5-6 | R7 | F501 |

| PHYSICS | E5-6 | R6 | F508 |

```
+-----+-----+-----+-----+
```

4 rows in set (0.003 sec)

16. Display all students name studying either of Software or Computer as Major.

MariaDB [collmgmtsys]> select Name from student

-> where Major = 'Software' OR Major = 'Computer';

```
+-----+
```

```
| Name      |
```

```
+-----+
```

```
| Susan Gurung |
```

```
| Sam KC      |
```

```
| Gopal Shrestha |
```

```
+-----+
```

3 rows in set (0.000 sec)

17. Delete all the students who is older than 25 years of age.

MariaDB [collmgmtsys]> Delete From student

-> where Age > 25 ;

Query OK, 1 row affected (0.014 sec)

MariaDB [collmgmtsys]> select * from student;

```
+-----+-----+-----+-----+-----+
```

Snum	Name	Major	Level	Age
101	Susan Gurung	Software	Bachelor	24
102	Sam KC	Computer	Bachelor	23
103	Hari Rai	Electronic	Masters	25

3 rows in set (0.000 sec)

MariaDB [collmgmtsys]>