

**Information System Management Lab
BCOM 307**

Assignment #5

Submitted by:

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Course/Subject Code: BCOM 307 Subject Title: Information System Management Lab

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Instructions for Students:

1. **All Questions are Compulsory.**
2. The student should attach proper cover page for each assignment clearly mentioning the Assignment No.
3. Each assignment should be prepared by the student individually with proper explanation and screenshots.
4. A4 size ruled sheets should be used for the assignment.
5. Assignment pages should be serially numbered at the bottom of page.

During online education mode, upload scanned copy of the complete assignment including cover page latest by due date.

QuestionNo.	Question	CO No.
1	Create a table 'Student' with the following columns :- <ul style="list-style-type: none">● Enrollment No (Primary key)● Name● Email ID● Address● Mobile● Date of Birth● Marks	CO1
2	Insert 3 records in the 'student' table, with distinct values of enrollment number.	
3	Insert another record, where enrollment number is same as any one of the 3 records inserted, and all other values different.	
4	Insert another record, this time keeping enrollment number different, and all the other values same as any of the records inserted in the table.	

ASSIGNMENT 5 - PRIMARY KEY CONSTRAINT

Task 1 : Create a table 'Student' with the following columns :-

- 1. Enrollment No (Primary key)**
- 2. Name**
- 3. Email ID**
- 4. Address**
- 5. Mobile**
- 6. Date of Birth**
- 7. Marks**

The following task is completed using the 'create table' command, along with the 'primary key constraint'. Primary Key is one or more columns that uniquely identifies each row in the table. It means that each row value in this column would be distinct; there won't be any duplicate values. The syntax for primary key (to be used in table definition) is:

column_name datatype primary key,

(rest of the table definition)

The screenshot shows a database management tool interface. The top tab is 'ISM_Lab_Assignment_5-YashJain_BCom5A*'. The SQL editor contains the following code:

```

3 • create table student (
4   enrollment_no int(10) primary key,
5   student_name varchar(20),
6   email_ID varchar(20),
7   address varchar(30),
8   mobile int(10),
9   date_of_birth date,
10  marks float(5,2)
11 );
12 • desc student;

```

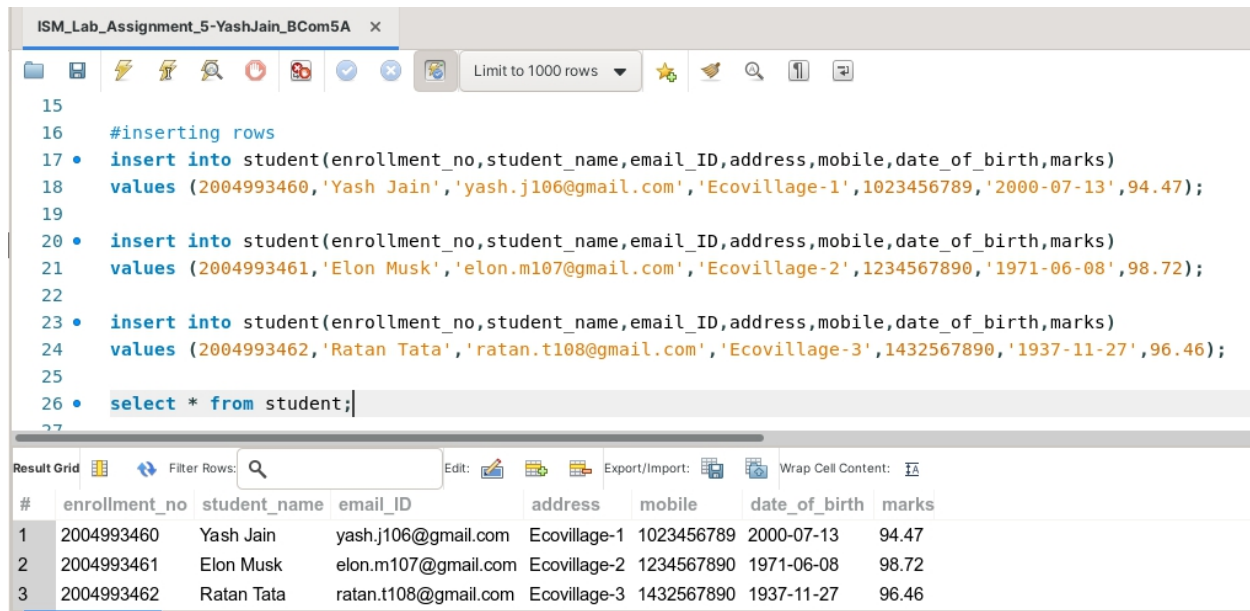
Below the SQL editor, the 'Result Grid' is displayed, showing the table structure for 'student'.

#	Field	Type	Null	Key	Default	Extra
1	enrollment_no	int	NO	PRI	NULL	
2	student_name	varchar(20)	YES		NULL	
3	email_ID	varchar(20)	YES		NULL	
4	address	varchar(30)	YES		NULL	
5	mobile	int	YES		NULL	
6	date_of_birth	date	YES		NULL	
7	marks	float(5,2)	YES		NULL	

The bottom of the screenshot shows a tab labeled 'Result 2'.

Task 2: Insert 3 records in the 'student' table, with distinct values of enrollment number.

The given task can be completed using the 'insert into' command. Note that when you will enter values, you cannot enter duplicate values in the primary key column, as it will show an error.



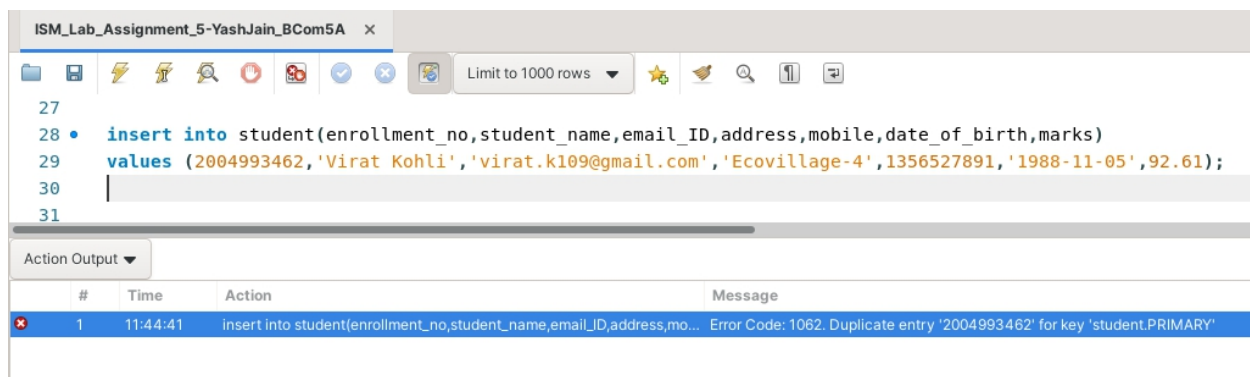
The screenshot shows a database management tool interface. The top toolbar includes icons for file operations, a search bar, and a 'Limit to 1000 rows' dropdown. The main area displays SQL commands for inserting three records into the 'student' table. Below the commands, the 'Result Grid' shows the resulting table with 3 rows.

```
15
16 #inserting rows
17 • insert into student(enrollment_no,student_name,email_ID,address,mobile,date_of_birth,marks)
18 values (2004993460,'Yash Jain','yash.j106@gmail.com','Ecovillage-1',1023456789,'2000-07-13',94.47);
19
20 • insert into student(enrollment_no,student_name,email_ID,address,mobile,date_of_birth,marks)
21 values (2004993461,'Elon Musk','elon.m107@gmail.com','Ecovillage-2',1234567890,'1971-06-08',98.72);
22
23 • insert into student(enrollment_no,student_name,email_ID,address,mobile,date_of_birth,marks)
24 values (2004993462,'Ratan Tata','ratan.t108@gmail.com','Ecovillage-3',1432567890,'1937-11-27',96.46);
25
26 • select * from student;
```

#	enrollment_no	student_name	email_ID	address	mobile	date_of_birth	marks
1	2004993460	Yash Jain	yash.j106@gmail.com	Ecovillage-1	1023456789	2000-07-13	94.47
2	2004993461	Elon Musk	elon.m107@gmail.com	Ecovillage-2	1234567890	1971-06-08	98.72
3	2004993462	Ratan Tata	ratan.t108@gmail.com	Ecovillage-3	1432567890	1937-11-27	96.46

Task 3: Insert another record, where enrollment number is same as any one of the 3 records inserted, and all other values different.

This task can be completed by using the command 'insert into'. Here, one will observe that **this query won't be completed**. This is because enrollment number is a primary key, hence we cannot enter duplicate values for it.



The screenshot shows the same database management tool interface. The SQL command area shows an attempt to insert a record with an enrollment number that already exists in the table. Below the command, the 'Action Output' pane displays an error message.

```
27
28 • insert into student(enrollment_no,student_name,email_ID,address,mobile,date_of_birth,marks)
29 values (2004993462,'Virat Kohli','virat.k109@gmail.com','Ecovillage-4',1356527891,'1988-11-05',92.61);
30
31
```

#	Time	Action	Message
1	11:44:41	insert into student(enrollment_no,student_name,email_ID,address,mo...	Error Code: 1062. Duplicate entry '2004993462' for key 'student.PRIMARY'

Task 4: Insert another record, this time keeping enrollment number different, and all the other values same as any of the records inserted in the table.

This task can be completed using the 'insert into' command. One would observe that this query will be completed, since the enrollment number is unique (required as per primary key constraint), but the other columns are not primary keys, hence their values can repeat.

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Limit to 1000 rows

```

32 #this command will be implemented as primary key value is unique
33 • insert into student(enrollment_no,student_name,email_ID,address,mobile,date_of_birth,marks)
34 values (2004993463,'Ratan Tata','ratan.t108@gmail.com','Ecovillage-3',1432567890,'1937-11-27',96.46);
35
36 • select * from student;
37

```

Result Grid

#	enrollment_no	student_name	email_ID	address	mobile	date_of_birth	marks
1	2004993460	Yash Jain	yash.j106@gmail.com	Ecovillage-1	1023456789	2000-07-13	94.47
2	2004993461	Elon Musk	elon.m107@gmail.com	Ecovillage-2	1234567890	1971-06-08	98.72
3	2004993462	Ratan Tata	ratan.t108@gmail.com	Ecovillage-3	1432567890	1937-11-27	96.46
4	2004993463	Ratan Tata	ratan.t108@gmail.com	Ecovillage-3	1432567890	1937-11-27	96.46