



AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)

Faculty of Information Technology
Department of Computer Science and Engineering

ADVANCE DATABASE MANAGEMENT SYSTEM

SECTION: B

Group : #11

DATE: 16-03-2020

University Management System

SUBMITTED BY

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SEMESTER: SPRING 2020-21

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Introduction

The university management system is developed to override the problems prevailing in the practicing manual system, this system is supported to eliminate and in some cases reduce the hardships faced by this existing system. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. University management system basically manages the maintenance of university, college, staff, student information with the university. It is an automation framework, which issued to store the college, faculty, courses and information of a university. Starting from registration of a new student in the college, it maintains all the details regarding the attendance and marks of the students. The project deals with retrieval of information through an INTRANET based campus wide portal. It collects related information from all the departments of an organization and maintains files, which are used to generate reports in various forms to measure individual and overall performance of the students. Every university, whether big or small, has challenges to overcome and managing the information of students, faculties, Registrations, courses at the management level. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the right level of information and details for your future goals.

Project Proposal

Title:

University Management System

Vision:

Leadership in community engagement through excellence in education, research and leadership.

Approach:

To serve the community with excellence in teaching and learning, relevant and respected research, lifelong learning opportunities, effective and efficient administration, leadership service and development and community engagement for mutual enrichment.

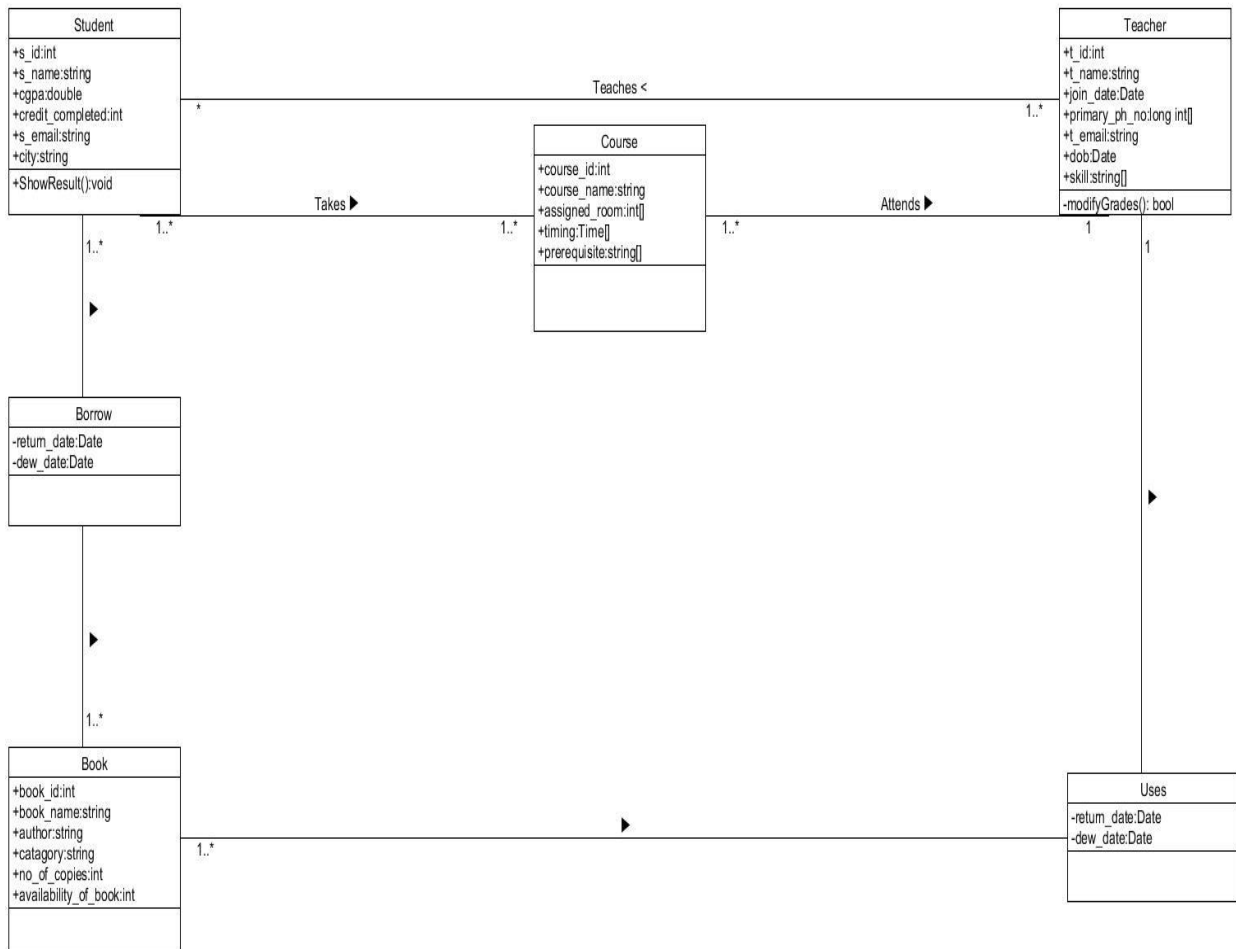
Budget:

It will take minimum 80 laks-1.2 cores take for 10 engineers and working day 56 with 6 hours per day.

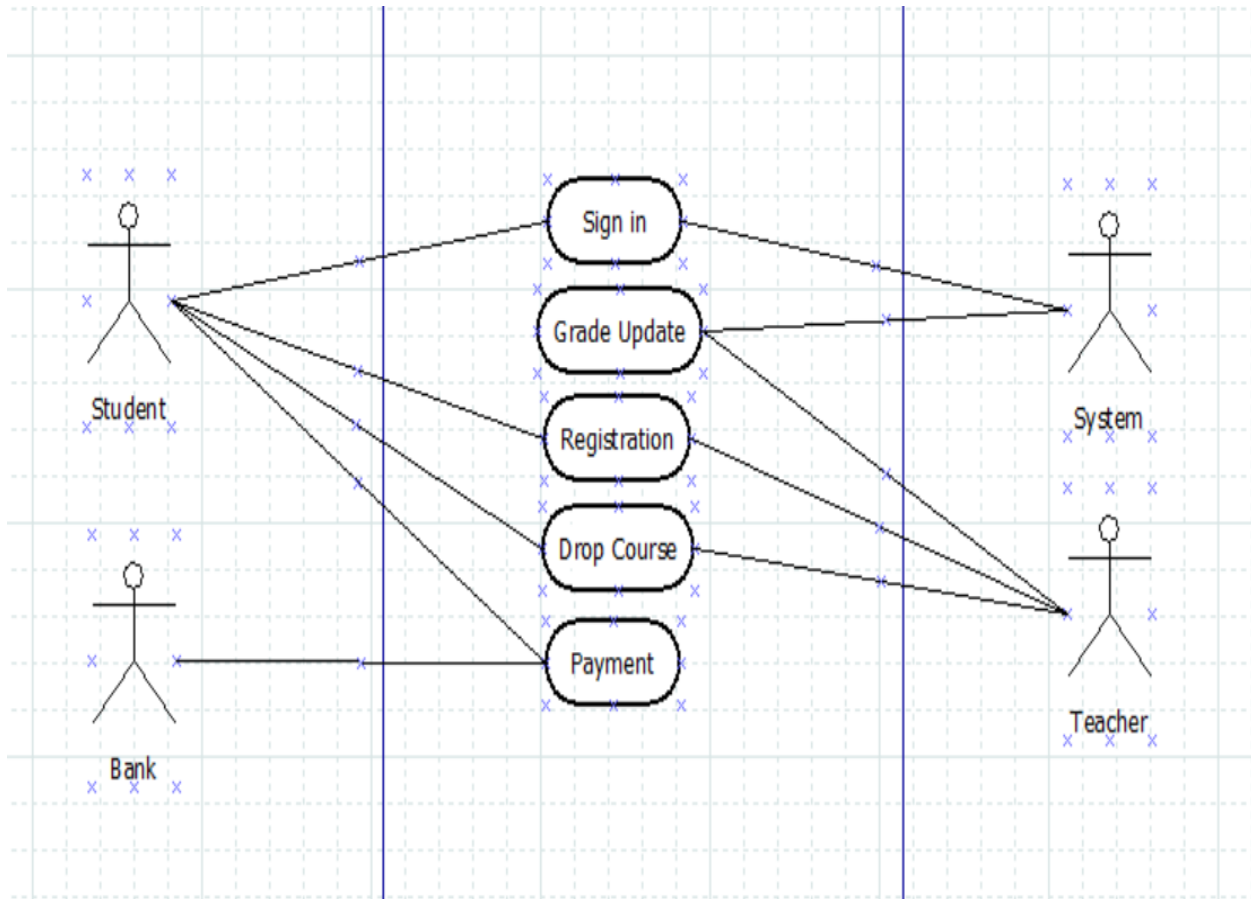
Success Criteria:

The traditional definition of success correlates directly to delivery on time, within budget, and within scope. These traditional success factors do not account for benefits realization and quality.

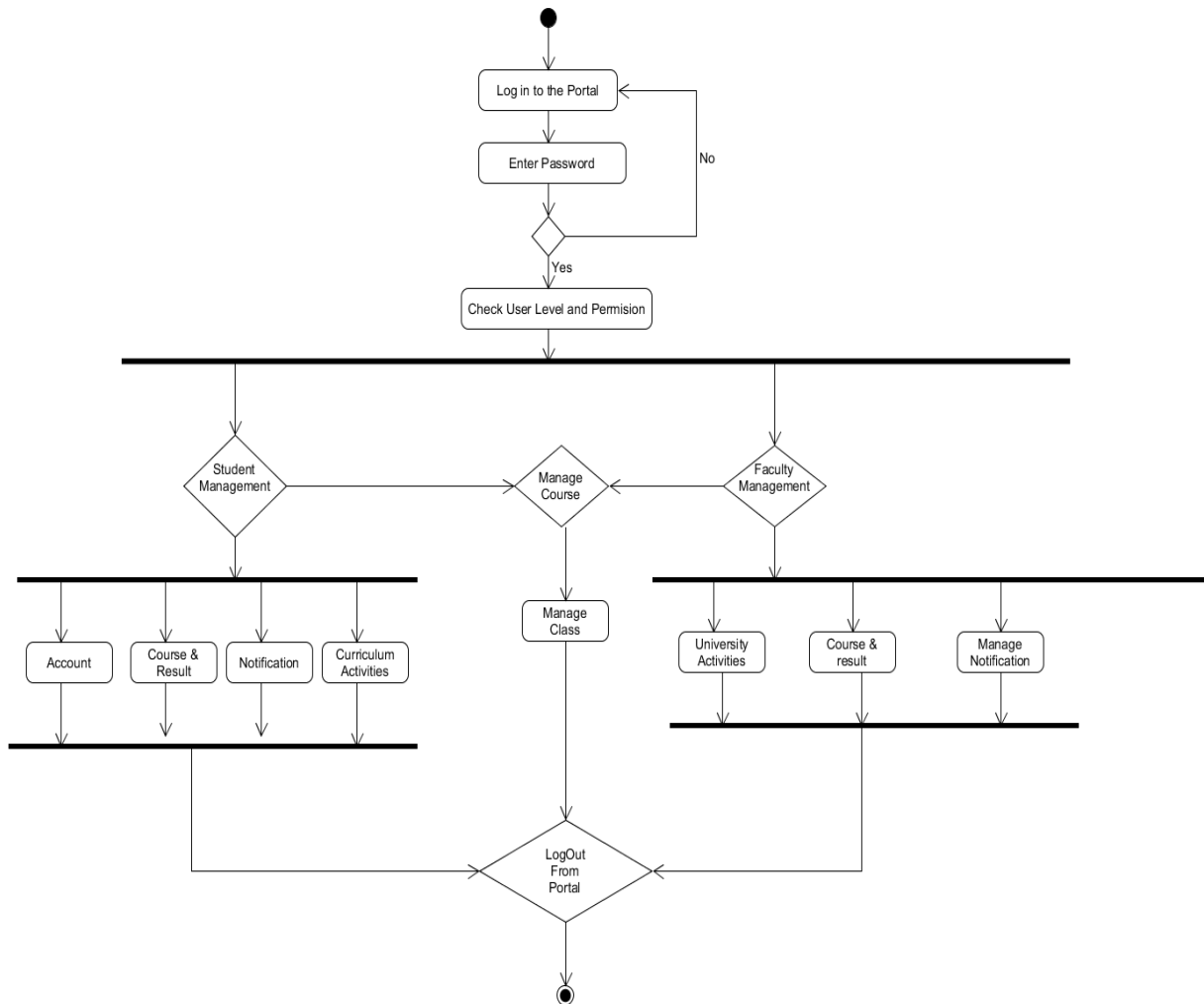
Class Diagram



Use Case Diagram



Activity Diagram



User Interface

Teacher Information

TEACHER ID

id

TEACHER NAME

name

SKILLS

skills

JOIN DATE

dd-mm-yyyy

PHdata NUMBER

+8801xxxxxxxxx

EMAIL ADDRESS

name@example.com

CITY

e.g. Dhaka

COUNTRY

e.g. Bangladesh

Submit

Reset

Student Information

STUDENT ID

XX-XXXXXX-X

STUDENT NAME

name

CGPA

4.00

CREDIT COMPLETED

56

CITY

e.g. Dhaka

COUNTRY

e.g. Bangladesh

Submit

Reset

Book Information

BOOK ID

BOOK NAME

AUTHOR NAME

CATEGORY

NUMBER OF COPY

STATUS



Course Information

COURSE ID

COURSE NAME

PREREQUISITE

ASSIGNED ROOM

CLASS TIME

Borrow Book Information

BOOK ID

DUE DATE



RETURN DATE



LOGIN

STUDENT TABLE

Search Here



STUDENT ID	STUDENT NAME	CGPA	CREDIT COMPLETED	EMAIL	CITY	OPERATION
1	Mustafizur Rahaman	3.14	100	fiz@gmail.com	Satkhira	
2	Fahim Ahmed	2.50	68	fahim@yahoo.com	Pabna	
3	Afroza Akter	3.75	96	afroza33@gmail.com	Sylhet	
4	Tamim Iqbal	3.84	50	tamim28@gmail.com	Chittagong	
5	Md. Tarikul Islam	2.98	119	tariqul@yahoo.com	Cumilla	

TEACHER TABLE

Search Here



TEACHER ID	TEACHER NAME	JOIN DATE	PHdata NUMBER	EMAIL	DATE OF BIRTH	OPERATION
1	Dr. Md Hafizur Rahman	17-DEC-08	01818647295	hafizur@ums.edu	17-DEC-80	
2	Dr. Masud Rana	9-DEC-08	01818647295	masud@ums.edu	10-FEB-80	
3	Dr. Md Jamal	18-FEB-08	01818647295	md.jamal@ums.edu	12-JUN-80	
4	Dr. Md Kamal	17-NOV-08	01818647295	kamal@ums.edu	17-DEC-80	
5	Dr. Md Sufia	17-DEC-08	01818647295	sufia@ums.edu	17-DEC-80	

ADDRESS TABLE

Search Here



CITY	COUNTRY	OPERATION
data	data	
data	data	
data	data	
data	data	
data	data	

TEACHERS SKILLS TABLE

Search Here



TEACHER ID	SKILLS	OPERATION
data	data	
data	data	
data	data	
data	data	
data	data	

COURSE DETAILS

Search Here



COURSE ID	COURSE NAME	PREREQUISITE	OPERATION
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁

COURSE SCHEDULE

Search Here



COURSE ID	ASSIGNED ROOM	TIME	OPERATION
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁
data	data	data	✎ 🗑 👁

BOOK DETAILS

Search Here


















BOOK ID	BOOK NAME	AUTHOR	CATEGORY	NO. OF COPY	STATU	OPERATION
data	data	data	data	data	data	✎ 🗑 👁
data	data	data	data	data	data	✎ 🗑 👁
data	data	data	data	data	data	✎ 🗑 👁
data	data	data	data	data	data	✎ 🗑 👁
data	data	data	data	data	data	✎ 🗑 👁

STUDENT BORROW BOOK DETAILS

Search Here



STUDENT ID	BOOK ID	DUE DATE	RETURN DATE	OPERATION
data	data	data	data	✎ 🗑 👁
data	data	data	data	✎ 🗑 👁
data	data	data	data	✎ 🗑 👁
data	data	data	data	✎ 🗑 👁
data	data	data	data	✎ 🗑 👁

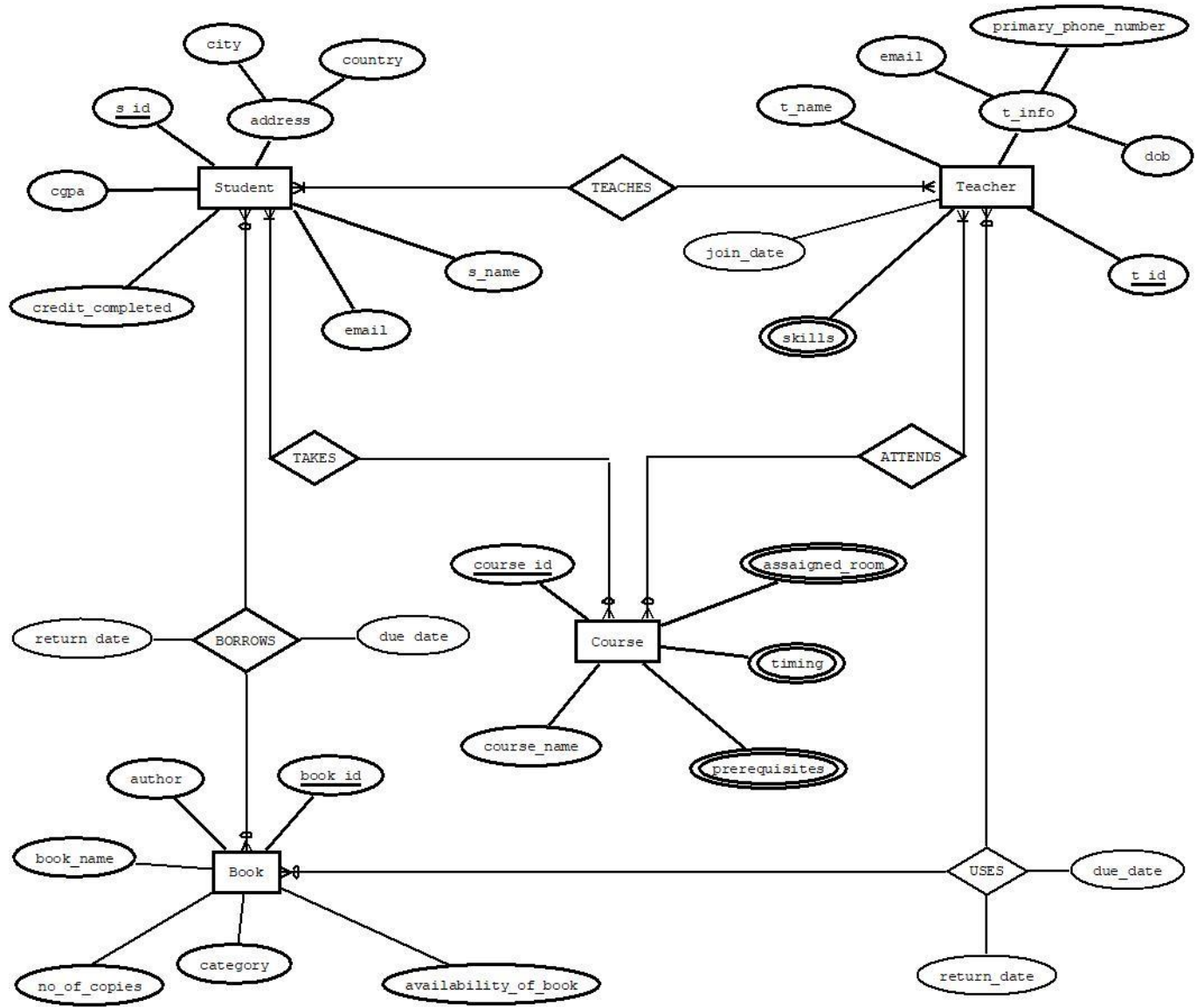
TEACHER ID	BOOK ID	DUE DATE	RETURN DATE	OPERATION
data	data	data	data	  
data	data	data	data	  
data	data	data	data	  
data	data	data	data	  
data	data	data	data	  

Scenario Description

You have to create a database for your university. For this you should first draw an er-diagram. The diagram would have the following characteristics.

1. There will be at least four entity set: Student, Teacher, Course, and Book
2. Each student has a unique id, name, cgpa. The database will also store a student completed no of credit, email and address which is composited with city and country.
3. Each teacher has a unique id, name, skills, email, primary phone number, join date and date of birth.
4. The course entity set will have a unique course id, course name, pre-requisite, time, and assigned
5. As the representation of the library of the university, use books entity set. Each book have a book id which is unique. Other attributes are books name, author name, no of copies of each book, category and availability of the book. When a person issues a book then the due date and returned date also gets stored.
6. A teacher can teach many students and also a student can be taught by many teachers.
7. A student can take many courses and also a teacher can attend many courses. One course must have at least one student and one teacher
8. A course can be taken and attended by more than one student and more than one teacher respectively.
9. A student can borrow multiple books from library and a teacher also can use multiple books.

ER Diagram



Normalization



UNF:

s_id, s_name, cgpa, credit_completed, s_email, city, country, t_id, t_name, join_date, skills, t_email, primary_ph_no, dob

1NF:

s_id, t_id, skills, s_name, cgpa, credit_completed, s_email, city, country, t_name, join_date, t_email, primary_ph_no, dob

2NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city, country

TABLE 2: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 3: t_id, skills

TABLE 4: s_id, t_id

3NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city

TABLE 2: city, country

TABLE 3: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 4: t_id, skills

TABLE 5: s_id, t_id



UNF:

s_id, s_name, cgpa, credit_completed, s_email, city, country, course_id, couse_name, assigned_room, timing, prerequisite

1NF:

s_id, course_id, assigned_room, timing, s_name, cgpa, credit_completed, s_email, city, course_name, prerequisite

2NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city, country

TABLE 2: course_id, couse_name, prerequisite

TABLE 3: course_id, assigned_room, timing

TABLE 4: s_id, course_id

3NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city

TABLE 2: city, country

TABLE 3: course_id, couse_name, prerequisite

TABLE 4: course_id, assigned_room, timing

TABLE 5: s_id, course_id



UNF:

t_id, t_name, join_date, skills, t_email, primary_ph_no, dob, course_id, couse_name, assigned_room, timing, prerequisite

1NF:

t_id, course_id, assigned_room, timing, prerequisite, skills, t_name, join_date, t_email, primary_ph_no, dob, couse_name

2NF:

TABLE 1: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 2: t_id, skills

TABLE 3: course_id, couse_name, prerequisite

TABLE 4: course_id, assigned_room, timing

TABLE 5: course_id, t_id

3NF:

TABLE 1: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 2: t_id, skills

TABLE 3: course_id, couse_name, prerequisite

TABLE 4: course_id, assigned_room, timing

TABLE 5: course_id, t_id



UNF:

s_id, s_name, cgpa, credit_completed, s_email, city, country, book_id, author, book_name, no_of_copies, category, availability_of_books, due_date, return_date

1NF:

s_id, book_id, s_name, cgpa, credit_completed, s_email, city, country, author, book_name, no_of_copies, category, availability_of_books, due_date, return_date

2NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city, country

TABLE 2: book_id, book_name, author, category, no_of_copies, availability_of_books

TABLE 3: s_id, book_id, due_date, return_date

3NF:

TABLE 1: s_id, s_name, cgpa, credit_completed, s_email, city

TABLE 2: city, country

TABLE 3: book_id, book_name, author, category, no_of_copies, availability_of_books

TABLE 4: s_id, book_id, due_date, return_date



UNF:

t_id, t_name, join_date, skills, t_email, primary_ph_no, dob, book_id, author, book_name, no_of_copies, category, availability_of_books, due_date, return_date

1NF:

t_id, book_id, author, book_name, no_of_copies, category, availability_of_books, t_name, join_date, skills, t_email, primary_ph_no, dob, due_date, return_date

2NF:

TABLE 1: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 2: t_id, skills

TABLE 3: book_id, book_name, author, category, no_of_copies, availability_of_books

TABLE 4: t_id, book_id, due_date, return_date

3NF:

TABLE 1: t_id, t_name, join_date, t_email, primary_ph_no, dob

TABLE 2: t_id, skills

TABLE 3: book_id, author, book_name, no_of_copies, category, availability_of_books

TABLE 4: t_id, book_id, due_date, return_date

FINAL TABLES:

TABLE 1:

<u>s_id</u>	s_name	cgpa	credit_completed	s_email	city

TABLE 2:

<u>city</u>	country

TABLE 3:

<u>t_id</u>	t_name	join_date	primary_ph_no	t_email	dob

TABLE 4:

<u>t_id</u>	<u>skills</u>

TABLE 5:

<u>s_id</u>	<u>t_id</u>

TABLE 6:

<u>course_id</u>	course_name	<u>prerequisite</u>

TABLE 7:

<u>course_id</u>	<u>assigned_room</u>	<u>timing</u>

TABLE 8:

<u>s_id</u>	<u>course_id</u>

TABLE 9:

<u>course_id</u>	<u>t_id</u>

TABLE 10:

<u>book_id</u>	book_name	author	catagory	no_of_copies	availability_of_book

TABLE 11:

<u>s_id</u>	<u>book_id</u>	<u>due_date</u>	<u>return_date</u>

TABLE 12:

<u>t_id</u>	<u>book_id</u>	<u>due_date</u>	<u>return_date</u>

Schema Diagram

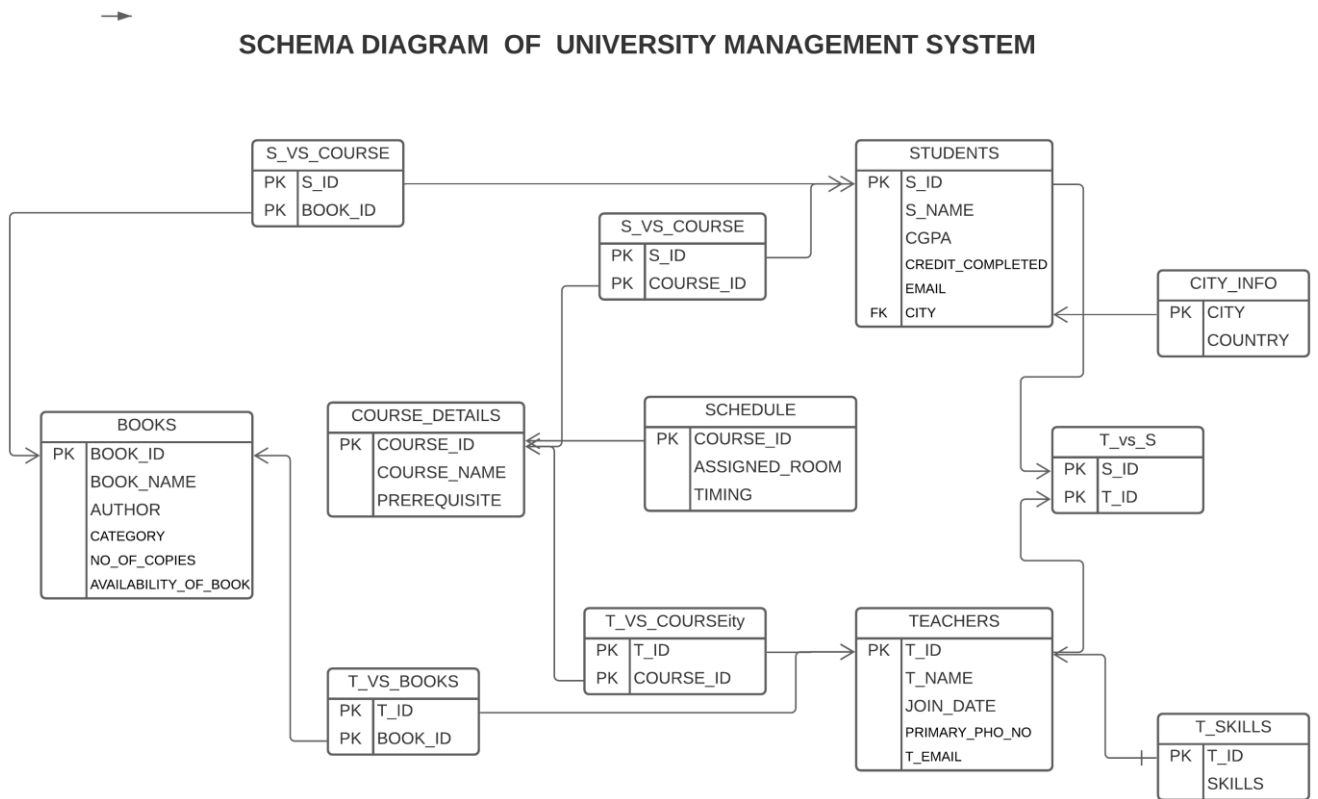
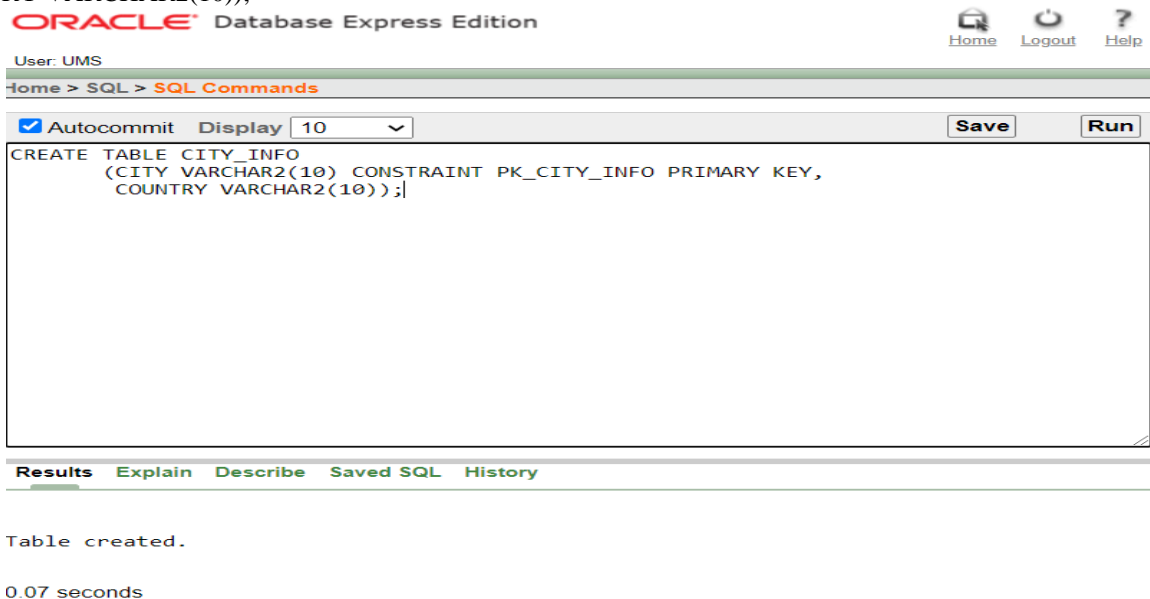


Table Creation

```
1) CREATE TABLE CITY_INFO
(CITY VARCHAR2(10) CONSTRAINT PK_CITY_INFO PRIMARY KEY,
COUNTRY VARCHAR2(10));
```



2) CREATE TABLE **STUDENTS**

```
(S_ID NUMBER (10) CONSTRAINT PK_STUDENTS PRIMARY KEY,  
S_NAME VARCHAR2(30),  
CGPA FLOAT (5),  
CREDIT_COMPLETED NUMBER (5),  
S_EMAIL VARCHAR2(30),  
CITY VARCHAR2(10) CONSTRAINT FK_CITY REFERENCES CITY_INFO);
```

The screenshot shows the Oracle Database Express Edition interface. At the top, it says "ORACLE Database Express Edition" and "User: UMS". There are links for "Home", "Logout", and "Help". Below the navigation bar, the breadcrumb "Home > SQL > SQL Commands" is visible. The main area has a toolbar with "Autocommit" (checked), "Display" (set to 10), "Save", and "Run". The SQL command window contains the following text:

```
CREATE TABLE STUDENTS  
(S_ID NUMBER(10) CONSTRAINT PK_STUDENTS PRIMARY KEY,  
S_NAME VARCHAR2(30),  
CGPA FLOAT(5),  
CREDIT_COMPLETED NUMBER(5),  
S_EMAIL VARCHAR2(30),  
CITY VARCHAR2(10) CONSTRAINT FK_CITY REFERENCES CITY_INFO);
```

Below the command window, there are tabs for "Results", "Explain", "Describe", "Saved SQL", and "History". The "Results" tab is active, showing the message "Table created." and the execution time "0.01 seconds".

3) CREATE TABLE **TEACHERS**

```
(T_ID NUMBER (10) CONSTRAINT PK_TEACHERS PRIMARY KEY,  
T_NAME VARCHAR2(30),  
JOIN_DATE DATE,  
PRIMARY_PHO_NO NUMBER (15),  
T_EMAIL VARCHAR2(30));
```

The screenshot shows the Oracle Database Express Edition interface. At the top, it says "ORACLE Database Express Edition" and "User: UMS". There are links for "Home", "Logout", and "Help". Below the navigation bar, the breadcrumb "Home > SQL > SQL Commands" is visible. The main area has a toolbar with "Autocommit" (checked), "Display" (set to 10), "Save", and "Run". The SQL command window contains the following text:

```
CREATE TABLE TEACHERS  
(T_ID NUMBER(10) CONSTRAINT PK_TEACHERS PRIMARY KEY,  
T_NAME VARCHAR2(30),  
JOIN_DATE DATE,  
PRIMARY_PHO_NO NUMBER(15),  
T_EMAIL VARCHAR2(30));
```

Below the command window, there are tabs for "Results", "Explain", "Describe", "Saved SQL", and "History". The "Results" tab is active, showing the message "Table created.".

4) CREATE TABLE T_VS_S
(T_ID NUMBER (10),
S_ID NUMBER (10),
CONSTRAINT PK_T_VS_S PRIMARY KEY(T_ID,S_ID));

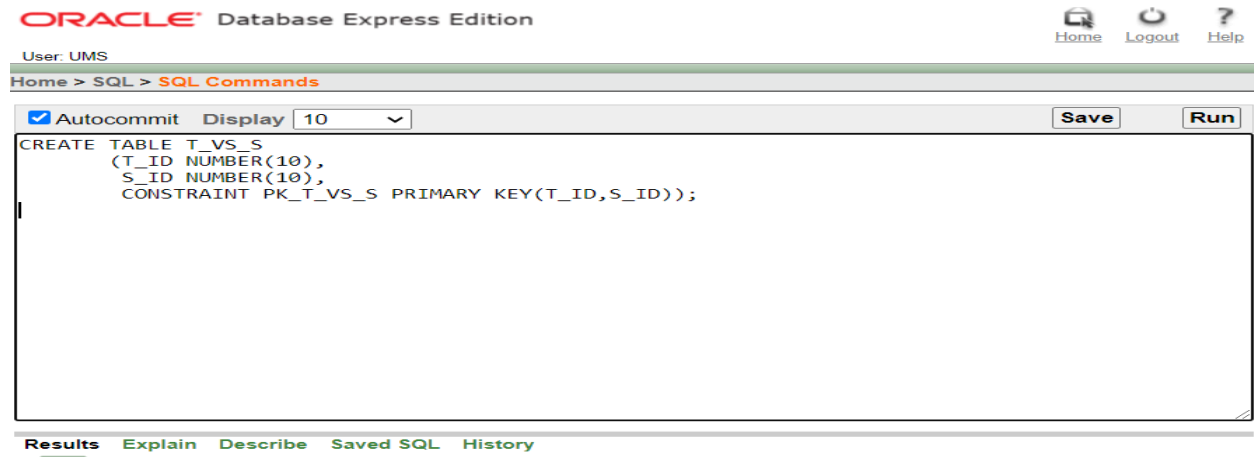


Table created.

5) CREATE TABLE T_SKILLS
(T_ID NUMBER (10),
SKILLS VARCHAR2(100),
CONSTRAINT PK_T_SKILLS PRIMARY KEY (T_ID, SKILLS));

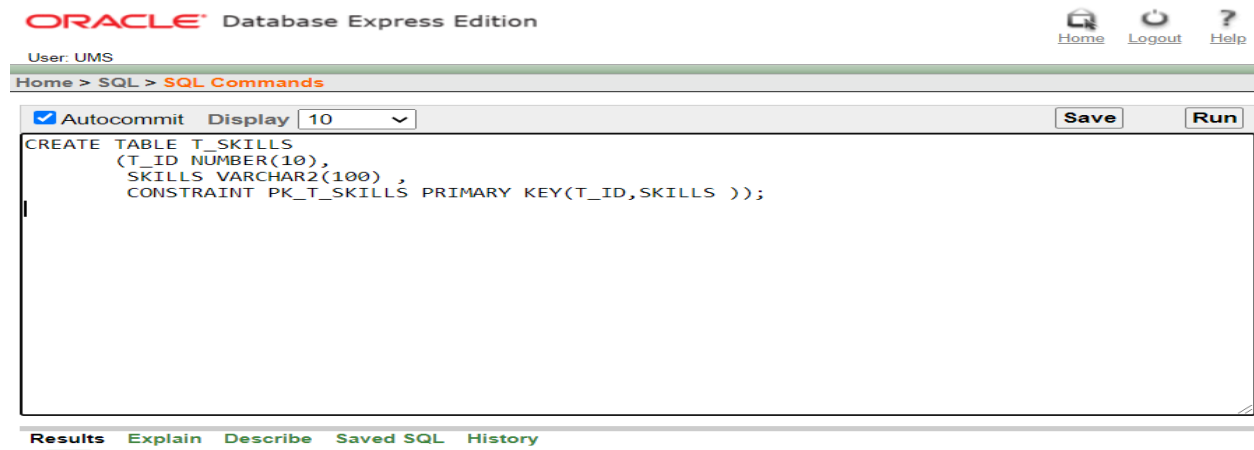


Table created.

6) CREATE TABLE **COURSE_DETAILS**
(COURSE_ID NUMBER(10),
COURSE_NAME VARCHAR2(50),
PREREQUISITE VARCHAR2(50),
CONSTRAINT PK_COURSE_DETAILS PRIMARY KEY (COURSE_ID, PREREQUISITE));

The screenshot shows the Oracle Database Express Edition interface. At the top, it says "ORACLE Database Express Edition" with navigation links for Home, Logout, and Help. Below this, it indicates the user is "User: UMS". The main window is titled "Home > SQL > SQL Commands". It features a toolbar with "Autocommit" (checked), "Display" (set to 10), "Save", and "Run" buttons. The central text area contains the following SQL command:

```
CREATE TABLE COURSE_DETAILS
(COURSE_ID NUMBER(10),
 COURSE_NAME VARCHAR2(50),
 PREREQUISITE VARCHAR2(50),
 CONSTRAINT PK_COURSE_DETAILS PRIMARY KEY(COURSE_ID,PREREQUISITE));
```

At the bottom of the window, there are tabs for "Results", "Explain", "Describe", "Saved SQL", and "History".

Table created.

7) CREATE TABLE **SCHEDULE**
(COURSE_ID NUMBER(10),
ASSIGNED_ROOM NUMBER(10),
TIMING VARCHAR2(10),
CONSTRAINT PK_COURSE_SCHEDULE PRIMARY KEY (COURSE_ID, ASSIGNED_ROOM, TIMING));

The screenshot shows the Oracle Database Express Edition interface. At the top, it says "ORACLE Database Express Edition" with navigation links for Home, Logout, and Help. Below this, it indicates the user is "User: UMS". The main window is titled "Home > SQL > SQL Commands". It features a toolbar with "Autocommit" (checked), "Display" (set to 10), "Save", and "Run" buttons. The central text area contains the following SQL command:

```
CREATE TABLE SCHEDULE
(COURSE_ID NUMBER(10),
 ASSIGNED_ROOM NUMBER(10),
 TIMING VARCHAR2(10),
 CONSTRAINT PK_COURSE_SCHEDULE PRIMARY KEY(COURSE_ID,ASSIGNED_ROOM,TIMING));
```

At the bottom of the window, there are tabs for "Results", "Explain", "Describe", "Saved SQL", and "History".

Table created.

8) CREATE TABLE S_VS_COURSE
(S_ID NUMBER (10),
COURSE_ID NUMBER (10),
CONSTRAINT PK_S_VS_COURSE PRIMARY KEY (S_ID, COURSE_ID));

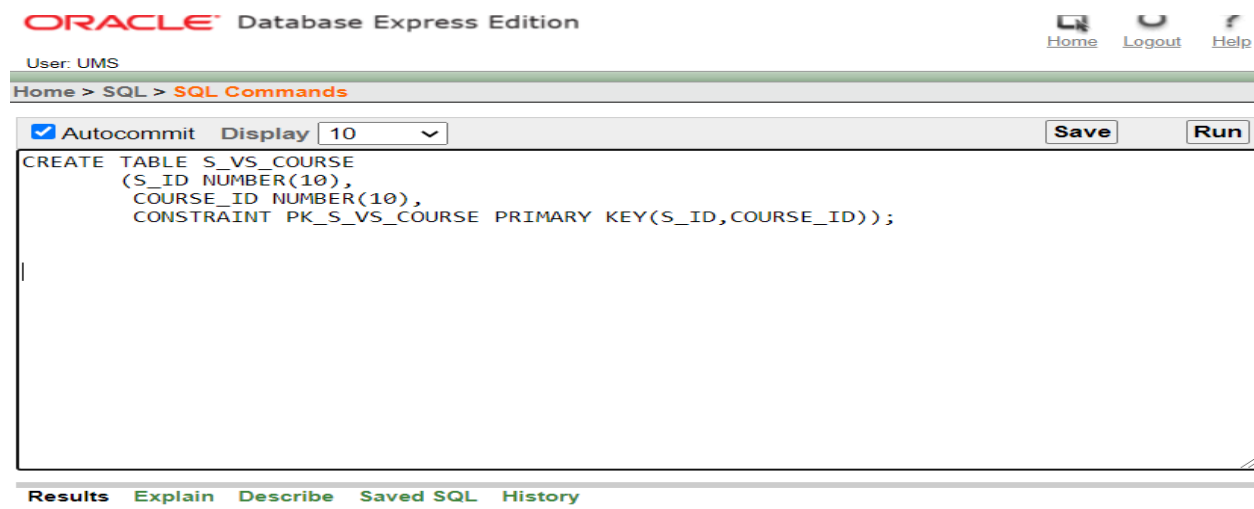


Table created.

9) CREATE TABLE T_VS_COURSE
(T_ID NUMBER (10),
COURSE_ID NUMBER (10),
CONSTRAINT PK_T_VS_COURSE PRIMARY KEY (T_ID, COURSE_ID));

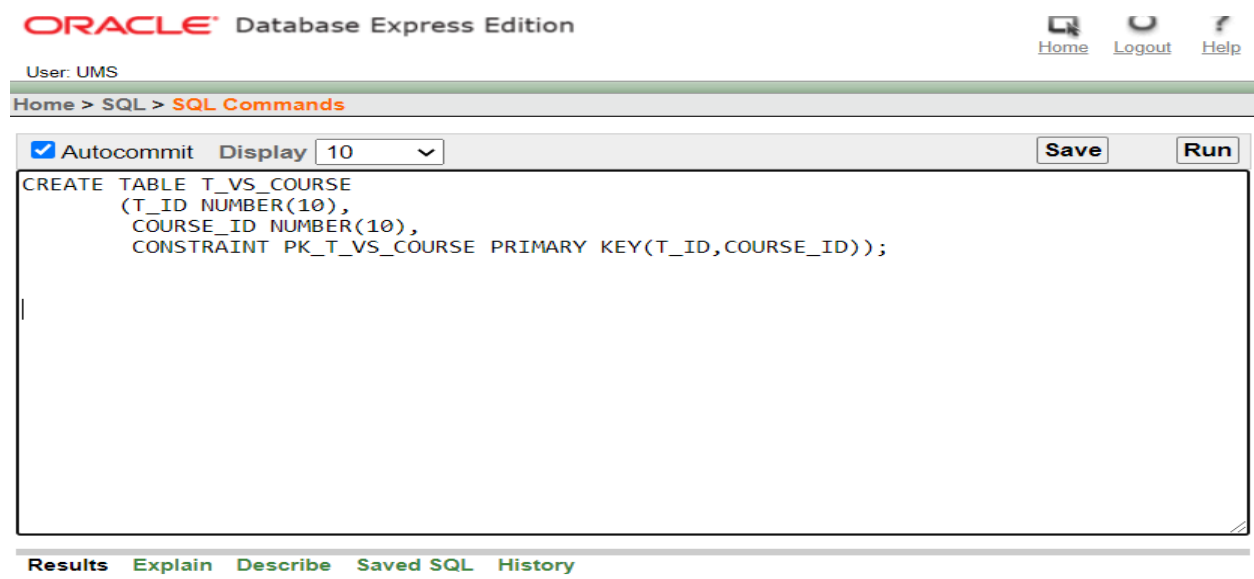


Table created.


```
10) CREATE TABLE BOOKS
(BOOK_ID NUMBER (10) CONSTRAINT PK_BOOKS PRIMARY KEY,
BOOK_NAME VARCHAR2(200),
AUTHOR VARCHAR2(200),
CATEGORY VARCHAR2(80),
NO_OF_COPIES NUMBER (10),
AVAILABILITY_OF_BOOK VARCHAR2(10));
```

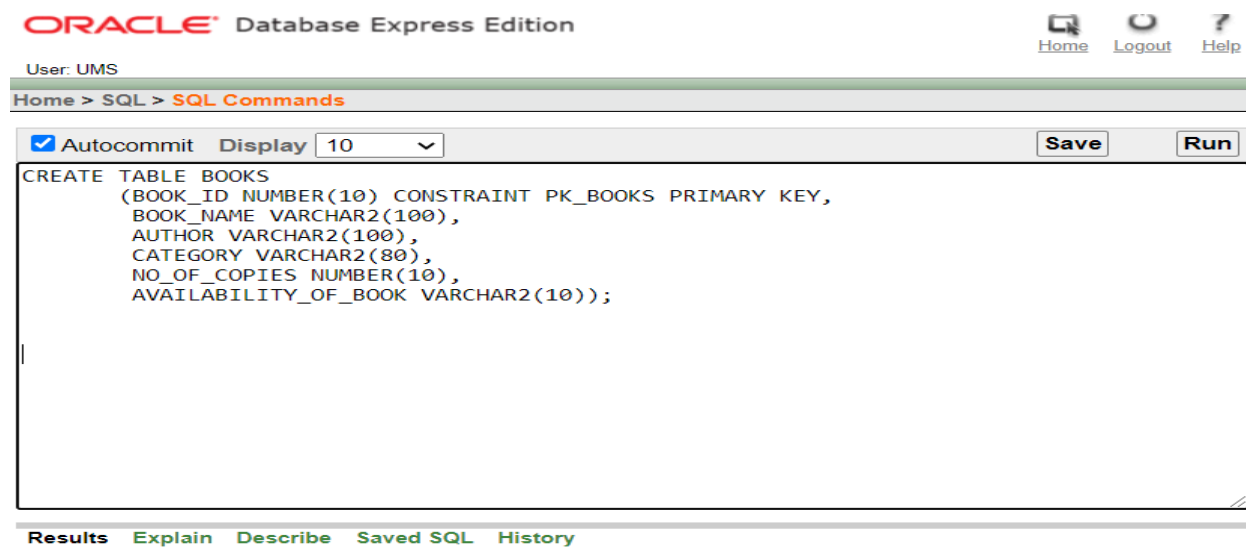


Table created.

```
11) CREATE TABLE S_VS_BOOKS
(S_ID NUMBER (10),
BOOK_ID NUMBER (10),
DUE_DATE DATE,
RETURN_DATE DATE,
CONSTRAINT PK_S_VS_BOOKS PRIMARY KEY (S_ID, BOOK_ID));
```

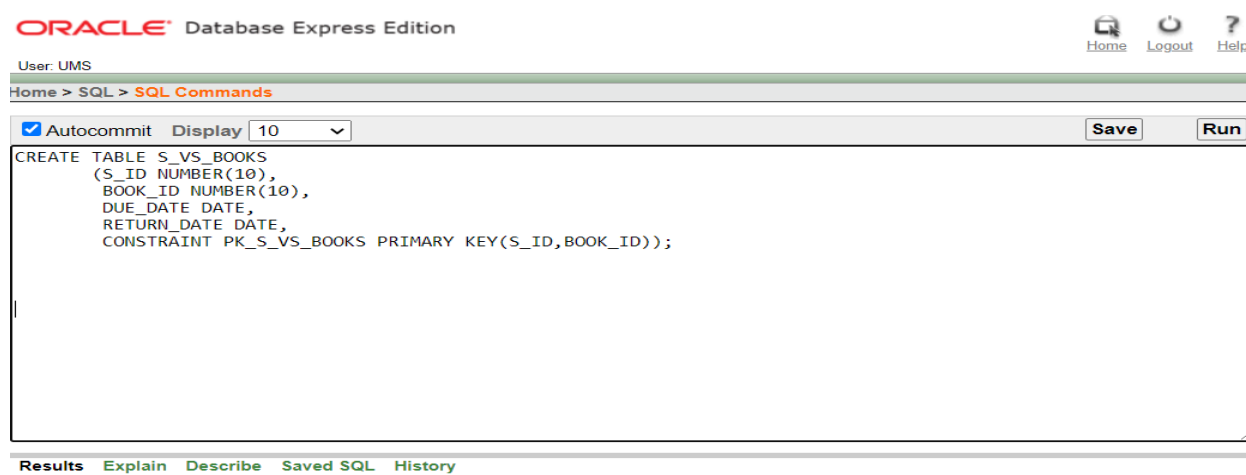


Table created.

```
12) CREATE TABLE T_VS_BOOKS
(T_ID NUMBER (10),
BOOK_ID NUMBER (10),
DUE_DATE DATE,
RETURN_DATE DATE,
CONSTRAINT PK_T_VS_BOOKS PRIMARY KEY (T_ID, BOOK_ID));
```

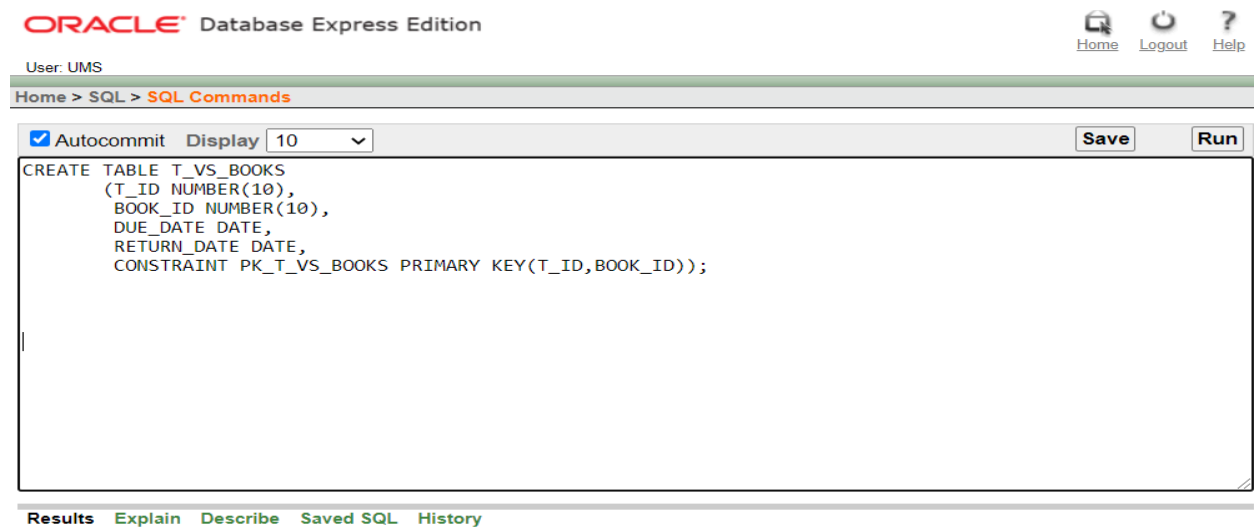
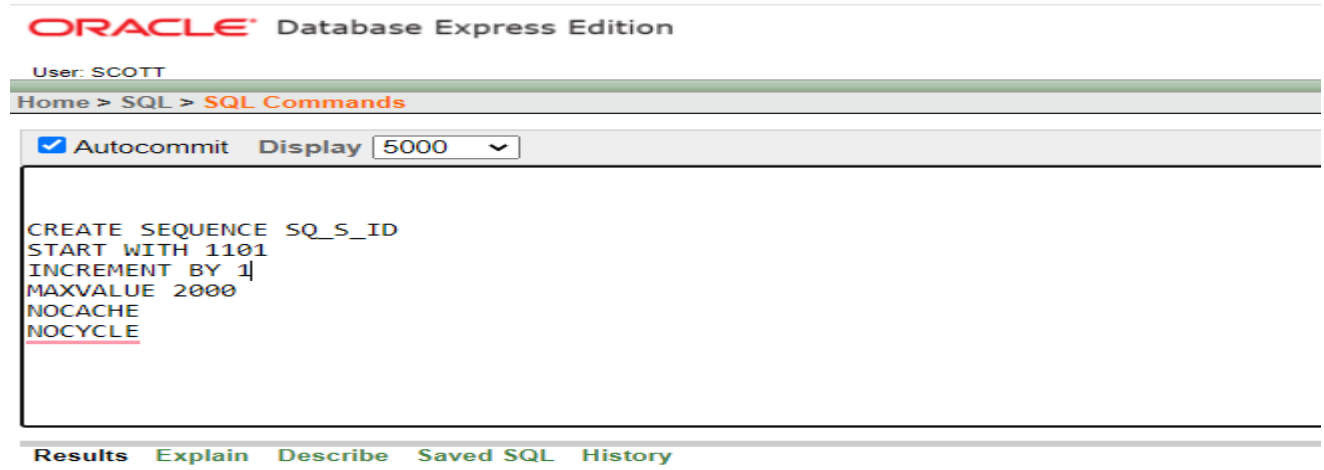


Table created.

Sequence:

```
CREATE SEQUENCE SQ_S_ID
START WITH 1101
INCREMENT BY 1
MAXVALUE 2000
NOCACHE
NOCYCLE
```



Sequence created.

0.00 seconds

```
CREATE SEQUENCE SQ_T_ID
START WITH 101
INCREMENT BY 1
MAXVALUE 1000
NOCACHE
NOCYCLE
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE SEQUENCE SQ_T_ID
START WITH 101
INCREMENT BY 1
MAXVALUE 1000
NOCACHE
NOCYCLE
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Sequence created.

0.00 seconds

```
CREATE SEQUENCE SQ_COURSE_ID
START WITH 1201
INCREMENT BY 1
MAXVALUE 3000
NOCACHE
NOCYCLE
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE SEQUENCE SQ_COURSE_ID
START WITH 1201
INCREMENT BY 1
MAXVALUE 3000
NOCACHE
NOCYCLE
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Sequence created.

0.00 seconds

```
CREATE SEQUENCE SQ_BOOK_ID
START WITH 9101
INCREMENT BY 1
MAXVALUE 10000
NOCACHE
NOCYCLE
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > **SQL Commands**

☒ Autocommit Display 5000 ▼

```
CREATE SEQUENCE SQ_BOOK_ID
START WITH 9101
INCREMENT BY 1
MAXVALUE 10000
NOCACHE
NOCYCLE
```

Results Explain Describe Saved SQL History

Sequence created.

0.00 seconds

Index:

```
CREATE INDEX STUDENTS_IDX
ON STUDENTS (S_NAME);
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > **SQL Commands**

☒ Autocommit Display 5000 ▼

```
CREATE INDEX SCHEDULE_IDX
ON SCHEDULE (ASSIGNED_ROOM);
```

Results Explain Describe Saved SQL History

Index created.

0.03 seconds

```
CREATE INDEX TEACHERS_IDX  
ON TEACHERS (T_NAME);
```

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE INDEX TEACHERS_IDX  
ON TEACHERS (T_NAME);
```

Results Explain Describe Saved SQL History

Index created.

0.03 seconds

```
CREATE INDEX BOOKS_IDX  
ON BOOKS (BOOK_NAME);
```

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE INDEX BOOKS_IDX  
ON BOOKS (BOOK_NAME);
```

Results Explain Describe Saved SQL History

Index created.

0.03 seconds

```
CREATE INDEX COURSE_DETAILS_IDX  
ON COURSE_DETAILS (COURSE_NAME);
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE INDEX COURSE_DETAILS_IDX  
ON COURSE_DETAILS (COURSE_NAME);
```

Results Explain Describe Saved SQL History

Index created.

0.03 seconds

```
CREATE INDEX SCHEDULE_IDX  
ON SCHEDULE (ASSIGNED_ROOM);
```

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 5000 ▼

```
CREATE INDEX SCHEDULE_IDX  
ON SCHEDULE (ASSIGNED_ROOM);
```

Results Explain Describe Saved SQL History

Index created.

0.03 seconds

Table Description:

DESCRIBE TEACHERS;

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE TEACHERS;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object TEACHERS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
TEACHERS	T_ID	Number	-	10	0	1	-	-	-
	T_NAME	Varchar2	30	-	-	-	✓	-	-
	JOIN_DATE	Date	7	-	-	-	✓	-	-
	PRIMARY_PHO_NO	Number	-	15	0	-	✓	-	-
	T_EMAIL	Varchar2	30	-	-	-	✓	-	-
1 - 5									

Language: en-us

DESCRIBE T_SKILLS;

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE T_SKILLS;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object T_SKILLS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
T_SKILLS	T_ID	Number	-	10	0	1	-	-	-
	SKILLS	Varchar2	100	-	-	2	-	-	-
1 - 2									

Language: en-us

DESCRIBE STUDENTS;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

DESCRIBE STUDENTS;

|

Results Explain Describe Saved SQL History

Object Type TABLE Object STUDENTS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STUDENTS	S_ID	Number	-	10	0	1	-	-	-
	S_NAME	Varchar2	30	-	-	-	✓	-	-
	CGPA	Float	22	5	-	-	✓	-	-
	CREDIT_COMPLETED	Number	-	5	0	-	✓	-	-
	S_EMAIL	Varchar2	30	-	-	-	✓	-	-
	CITY	Varchar2	30	-	-	-	✓	-	-

1 - 6

DESCRIBE CITY_INFO;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

DESCRIBE CITY_INFO;

Results Explain Describe Saved SQL History

Object Type TABLE Object CITY_INFO

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CITY_INFO	CITY	Varchar2	10	-	-	1	-	-	-
	COUNTRY	Varchar2	10	-	-	-	✓	-	-
1 - 2									

Language: en-us

DESCRIBE T_VS_S;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

DESCRIBE T_VS_S;

Results Explain Describe Saved SQL History

Object Type TABLE Object T_VS_S

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
T_VS_S	T_ID	Number	-	10	0	1	-	-	-
	S_ID	Number	-	10	0	2	-	-	-
1 - 2									

Language: en-us

DESCRIBE COURSE_DETAILS;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

DESCRIBE COURSE_DETAILS;

Results Explain Describe Saved SQL History

Object Type TABLE Object COURSE_DETAILS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
COURSE_DETAILS	COURSE_ID	Number	-	10	0	1	-	-	-
	COURSE_NAME	Varchar2	50	-	-	-	✓	-	-
	PREREQUISITE	Varchar2	50	-	-	2	-	-	-
1 - 3									

DESCRIBE SCHEDULE;

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE SCHEDULE;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object SCHEDULE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SCHEDULE	COURSE_ID	Number	-	10	0	1	-	-	-
	ASSIGNED_ROOM	Number	-	10	0	2	-	-	-
	TIMING	Varchar2	10	-	-	3	-	-	-
1 - 3									

Language: en-us

DESCRIBE S_VS_COURSE;

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE S_VS_COURSE;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object S_VS_COURSE

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
S_VS_COURSE	S_ID	Number	-	10	0	1	-	-	-
	COURSE_ID	Number	-	10	0	2	-	-	-
1 - 2									

Language: en-us

DESCRIBE T_VS_COURSE;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
DESCRIBE T_VS_COURSE;
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **T_VS_COURSE**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
T_VS_COURSE	T_ID	Number	-	10	0	1	-	-	-
	COURSE_ID	Number	-	10	0	2	-	-	-
1 - 2									

Language: en-us

DESCRIBE BOOKS;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
DESCRIBE BOOKS;
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **BOOKS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BOOKS	BOOK_ID	Number	-	10	0	1	-	-	-
	BOOK_NAME	Varchar2	200	-	-	-	-	-	-
	AUTHOR	Varchar2	100	-	-	-	✓	-	-
	CATEGORY	Varchar2	80	-	-	-	✓	-	-
	NO_OF_COPIES	Number	-	10	0	-	✓	-	-
	AVAILABILITY_OF_BOOK	Varchar2	10	-	-	-	✓	-	-
1 - 6									

DESCRIBE S_VS_BOOKS;

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE S_VS_BOOKS;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object S_VS_BOOKS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
S_VS_BOOKS	S_ID	Number	-	10	0	1	-	-	-
	BOOK_ID	Number	-	10	0	2	-	-	-
	DUE_DATE	Date	7	-	-	-	✓	-	-
	RETURN_DATE	Date	7	-	-	-	✓	-	-
									1 - 4

Language: en-us

DESCRIBE T_VS_BOOKS

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
DESCRIBE T_VS_BOOKS;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object T_VS_BOOKS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
T_VS_BOOKS	T_ID	Number	-	10	0	1	-	-	-
	BOOK_ID	Number	-	10	0	2	-	-	-
	DUE_DATE	Date	7	-	-	-	✓	-	-
	RETURN_DATE	Date	7	-	-	-	✓	-	-
									1 - 4

User, Role and Privileges:

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
CREATE USER MAHMUD
IDENTIFIED BY mahmud123;
```

Results Explain Describe Saved SQL History

User created.

0.01 seconds

ORACLE® Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
CREATE USER MAHMUD
IDENTIFIED BY mahmud123;

GRANT UNLIMITED TABLESPACE TO USER MAHMUD
grant connect, resource, unlimited tablespace to MAHMUD;

CREATE ROLE HEAD;
```

Results Explain Describe Saved SQL History

Role created.

0.00 seconds

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

Save

Run

```
GRANT CREATE SESSION,ALTER SESSION,CREATE TABLE,CREATE CLUSTER,CREATE SYNONYM,CREATE VIEW,CREATE SEQUENCE,CREATE DATABASE LINK,CREATE
PROCEDURE,CREATE TRIGGER,CREATE TYPE,CREATE OPERATOR,CREATE INDEXTYPE,BACKUP ANY TABLE,SELECT ANY TABLE,CREATE ANY TABLE,CREATE ANY
INDEX,ALTER ANY INDEX,ALTER ANY INDEXTYPE,DROP ANY INDEX,DROP ANY INDEXTYPE
TO HEAD;
```

⏏️ 😊 4

Results Explain Describe Saved SQL History

Statement processed.

0.00 seconds

User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10

```
GRANT HEAD to MAHMUD;
```

Results Explain Describe Saved SQL History

Statement processed.

0.02 seconds

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
CREATE USER MUSTOFA
IDENTIFIED BY mustofa123;

CREATE USER ZAKIR
IDENTIFIED BY zakir123;

CREATE USER RANI
IDENTIFIED BY rani123;

CREATE ROLE TEACHER;
GRANT CREATE VIEW
TO TEACHER;

GRANT TEACHER to MUSTOFA,ZAKIR,RANI;
```







Results Explain Describe Saved SQL History

Statement processed.

0.02 seconds

Data Insertion:

CITY_INFO			Create ▼
Table	Data	Indexes	Model
Constraints	Grants	Statistics	UI Defaults
Triggers	Dependencies	SQL	
Query	Count Rows	Insert Row	
EDIT	CITY	COUNTRY	
	DHAKA	BANGLADESH	
	MYMENSING	BANGLADESH	
	CUMILLA	BANGLADESH	
	BARISAL	BANGLADESH	
	RANGPUR	BANGLADESH	
	JESSORE	BANGLADESH	
	DELHI	INDIA	
	KATHMANDU	NEPAL	
row(s) 1 - 8 of 8			
Download			

STUDENTS							Create ▼
Table	Data	Indexes	Model	Constraints	Grants	Statistics	UI Defaults
Triggers	Dependencies	SQL					
Query	Count Rows	Insert Row					
EDIT	S_ID	S_NAME	CGPA	CREDIT_COMPLETED	S_EMAIL	CITY	
	1101	RAHAMAN MINHAZUR	3.5	132	MRS735069@GMAIL.COM	DHAKA	
	1102	HASAN MD NAZMUL	3.9	100	NAZMUL33@GMAIL.COM	CUMILLA	
	1103	HOSSAIN JAMAL	2.7	32	JAMAL@GMAIL.COM	BARISAL	
	1104	RAHAMAN ANISUR	3.3	147	ANIS@GMAIL.COM	MYMENSING	
	1105	PAUL ROHIT	3.3	48	ROHIT@GMAIL.COM	DELHI	
	1106	LAMICHAN SANDIP	4	16	LAMICHAN@GMAIL.COM	KATHMANDU	
row(s) 1 - 6 of 6							
Download							

T_SKILLS

Create

Table

Data

Indexes

Model

Constraints

Grants

Statistics

UI Defaults

Triggers

Dependencies

SQL

Query

Count Rows

Insert Row

EDIT

T_ID

SKILLS



101

JAVA



102

PHP



103

ASP.NET



104

DATABASE



105

LINUX



106

NETWORK SECURITY







row(s) 1 - 6 of 6

Download

TEACHERS

TableDataIndexesModelConstraintsGrantsStatisticsUI DefaultsTriggersDependenciesSQL







QueryCount RowsInsert Row

EDIT	T_ID	T_NAME	JOIN_DATE	PRIMARY_PHO_NO	T_EMAIL
	101	HASSAN MAHMUD	17-DEC-08	1386479254	DR.HASAN@GMAIL.COM
	102	KHAN MUSTOFA	23-NOV-10	1486478964	KHAN@GMAIL.COM
	103	HOSSAIN MD ZAKIR	18-OCT-16	1786479254	ZAKIR@GMAIL.COM
	104	RANI PARBOTI	10-JAN-13	1589679254	PARBOTI@GMAIL.COM
	105	SHUVRO ALLEN	13-MAY-07	1886464254	SHUVRO@GMAIL.COM
	106	MAHMUD HAYAT	07-JUL-20	1986489254	MAHMUD@GMAIL.COM
					row(s) 1 - 6 of 6






Download







T_VS_S

Table	Data	Indexes	Model	Constraints	Grants	Statistics	UI Defaults	Triggers	Dependencies	SQL
Query	Count Rows	Insert Row								
EDIT	T_ID	S_ID								
	101	1101								
	102	1102								
	103	1103								
	104	1104								
	105	1105								
	106	1106								
row(s) 1 - 6 of 6										
Download										

COURSE_DETAILS			
Table	Data	Indexes	Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL
Query	Count Rows	Insert Row	
EDIT	COURSE_ID	COURSE_NAME	PREREQUISITE
	1201	C++	C
	1202	JAVA	DATA STRUCTURE
	1203	C#	JAVA
	1204	WEB TECHNOLOGY	C#
	1205	ATP3	WEB TECHNOLOGY
	1206	COMPUTER NETWORK	OPERATING SYSTEM
row(s) 1 - 6 of 6			
Download			

Application F3

SCHEDULE			
Table	Data	Indexes	Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL
Query	Count Rows	Insert Row	
EDIT	COURSE_ID	ASSIGNED_ROOM	TIMING
	1201	5101	8:00-11:00
	1202	5106	8:00-10:00
	1203	5121	2:00-4:00
	1204	5101	12:00-1:30
	1206	4107	8:00-11:00
row(s) 1 - 5 of 5			
Download			

S_VS_COURSE		
Table	Data	Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL
Query	Count Rows	Insert Row
EDIT	S_ID	COURSE_ID
	1101	1201
	1102	1202
	1103	1203
	1104	1204
	1105	1205
	1106	1206
row(s) 1 - 6 of 6		
Download		

[illegible]

```
INSERT INTO BOOKS VALUES(SQ_BOOK_ID.NEXTVAL,'ASSEMBLY LANGUAGE PROGRAMMING AND ORGANIZATION OF THE IBM
PC','CHARLES MARUT AND YTHA Y. YU','PROGRAMMING',6,'YES');
```

```
INSERT INTO T_VS_S VALUES(SQ_T_ID.CURRVAL,SQ_S_ID.CURRVAL);
```

```
INSERT INTO T_SKILLS VALUES(SQ_T_ID.CURRVAL,'DATABASE');
```

```
INSERT INTO T_VS_COURSE VALUES(SQ_T_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
INSERT INTO S_VS_COURSE VALUES(SQ_S_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
```

```
INSERT INTO T_VS_BOOKS VALUES(SQ_T_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('20-3-2021','dd-mm-yyyy'),to_date('21-3-2021','dd-mm-yyyy'));
INSERT INTO S_VS_BOOKS VALUES(SQ_S_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('8-3-2021','dd-mm-yyyy'),to_date('7-3-2021','dd-mm-yyyy'));
```

```
INSERT INTO SCHEDULE VALUES(SQ_COURSE_ID.CURRVAL,5101,'12:00-1:30');
```

<<<<<<<<<<<<<<<---

5 No. Row --->>>>>>>>>>>>>>>>>>>

```
INSERT INTO STUDENTS VALUES(SQ_S_ID.NEXTVAL,'PAUL ROHIT',3.25,48,'ROHIT@GMAIL.COM','DELHI');
```

```
INSERT INTO TEACHERS VALUES(SQ_T_ID.NEXTVAL,'SHUVRO ALLEN',to_date('13-5-2007','dd-mm-yyyy'),01886464254,'SHUVRO@GMAIL.COM');
```

```
INSERT INTO COURSE_DETAILS VALUES(SQ_COURSE_ID.NEXTVAL,'ATP3','WEB TECHNOLOGY');
```

```
INSERT INTO BOOKS VALUES(SQ_BOOK_ID.NEXTVAL,'ACCOUNTING PRINCIPLES','PAUL D KIMMEL','ACCOUNTING',12,'YES');
INSERT INTO T_VS_S VALUES(SQ_T_ID.CURRVAL,SQ_S_ID.CURRVAL);
```

```
INSERT INTO T_SKILLS VALUES(SQ_T_ID.CURRVAL,'LINUX');
```

```
INSERT INTO T_VS_COURSE VALUES(SQ_T_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
INSERT INTO S_VS_COURSE VALUES(SQ_S_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
```

```
INSERT INTO T_VS_BOOKS VALUES(SQ_T_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('24-1-2021','dd-mm-yyyy'),to_date('24-1-2021','dd-mm-yyyy'));
INSERT INTO S_VS_BOOKS VALUES(SQ_S_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('18-1-2021','dd-mm-yyyy'),to_date('17-1-2021','dd-mm-yyyy'));
```

```
INSERT INTO SCHEDULE VALUES(SQ_COURSE_ID.CURRVAL,,5101,'10:00-1:00');
```

<<<<<<<<<<<<<<<<<<<-----

[illegible]

```
INSERT INTO STUDENTS VALUES(SQ_S_ID.NEXTVAL,'LAMICHAN SANDIP',3.98,16,'LAMICHAN@GMAIL.COM','KATHMANDU');
```

```
INSERT INTO TEACHERS VALUES(SQ_T_ID.NEXTVAL,'MAHMUD HAYAT',to_date('7-7-2020','dd-mm-yyyy'),01986489254,'MAHMUD@GMAIL.COM');
```

```
INSERT INTO COURSE_DETAILS VALUES(SQ_COURSE_ID.NEXTVAL,'COMPUTER NETWORK','OPERATING SYSTEM');
```

```
INSERT INTO BOOKS VALUES(SQ_BOOK_ID.NEXTVAL,'PRINCIPLES OF ECONOMICS','N GREGORY MANKIW','ECONOMICS',10,'YES');
```

```
INSERT INTO T_VS_S VALUES(SQ_T_ID.CURRVAL,SQ_S_ID.CURRVAL);
```

```
INSERT INTO T_SKILLS VALUES(SQ_T_ID.CURRVAL,'NETWORK SECURITY');
```

```
INSERT INTO T_VS_COURSE VALUES(SQ_T_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
INSERT INTO S_VS_COURSE VALUES(SQ_S_ID.CURRVAL,SQ_COURSE_ID.CURRVAL);
```

```
INSERT INTO T_VS_BOOKS VALUES(SQ_T_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('25-3-2021','dd-mm-yyyy'),to_date('22-3-2021','dd-mm-yyyy'));
INSERT INTO S_VS_BOOKS VALUES(SQ_S_ID.CURRVAL,SQ_BOOK_ID.CURRVAL,to_date('11-1-2021','dd-mm-yyyy'),to_date('10-1-2021','dd-mm-yyyy'));
```

```
INSERT INTO SCHEDULE VALUES(SQ_COURSE_ID.CURRVAL,4107,'8:00-11:00');
```

<<<<<<<<<<<<<<---

Query Writing:

Single-row functions:

Qn. No. 1: Show the Books name, author and category in upper, lower and first character upper respectively.

```
SELECT UPPER (BOOK_NAME), LOWER (AUTHOR), INITCAP (CATEGORY)
FROM BOOKS
```

Home > SQL > SQL Commands

☒ Autocommit Display 5000 Save Run

```
SELECT UPPER (BOOK_NAME), LOWER (AUTHOR), INITCAP (CATEGORY)
FROM BOOKS
```

Results Explain Describe Saved SQL History

UPPER(BOOK_NAME)	LOWER(AUTHOR)	INITCAP(CATEGORY)
LET US C	yashavant kanetkar	Programming
ANSI C	balagurusamy	Programming
DIGITAL FUNDAMENTAL	I floyd	Electrical Engineering
ASSEMBLY LANGUAGE PROGRAMMING AND ORGANIZATION OF THE IBM PC	charles marut and ytha y. yu	Programming
ACCOUNTING PRINCIPLES	paul d kimmel	Accounting
PRINCIPLES OF ECONOMICS	n gregory mankiw	Economics

6 rows returned in 0.01 seconds [CSV Export](#)

Qn. No. 2: Display the Teachers experience year of the university in zero rounded figure.

```
SELECT ROUND (MONTHS_BETWEEN (SYSDATE, JOIN_DATE)/12,0) EXPERIENCE
FROM TEACHERS
```

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```
SELECT ROUND (MONTHS_BETWEEN (SYSDATE, JOIN_DATE)/12,0) EXPERIENCE
FROM TEACHERS
```

Results Explain Describe Saved SQL History

EXPERIENCE
12
10
4
8
14
1

6 rows returned in 0.00 seconds [CSV Export](#)

Application Express 7.1.0.00.20

Qn. No. 3: Display the first three character of the student's name.

```
SELECT SUBSTR(S_NAME,1,3)
FROM STUDENTS
```

☒ Autocommit Display 5000 ▼

```
SELECT SUBSTR(S_NAME,1,3)
FROM STUDENTS
```

Results Explain Describe Saved SQL History

SUBSTR(S_NAME,1,3)
RAH
HAS
HOS
RAH
PAU
LAM

6 rows returned in 0.00 seconds

[CSV Export](#)

Group function:

Qn. No. 1: Find the total student in the university

```
SELECT COUNT (DISTINCT S_ID)
FROM STUDENTS;
```

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```
SELECT COUNT (DISTINCT S_ID)
FROM STUDENTS;
```

Results Explain Describe Saved SQL History

COUNT(DISTINCTS_ID)

6

1 rows returned in 0.02 seconds

[CSV Export](#)**Qn. No. 2:** Show the Maximum CGPA among the Students

```
SELECT MAX(CGPA)
FROM STUDENTS
```

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```
SELECT MAX(CGPA)
FROM STUDENTS
```

Results Explain Describe Saved SQL History

MAX(CGPA)

4

1 rows returned in 0.00 seconds

[CSV Export](#)**Qn. No. 3:** Find out total number of available books in Library

```
SELECT SUM(NO_OF_COPIES)
FROM BOOKS
WHERE AVAILABILITY_OF_BOOK<>'NO'
```


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```
SELECT SUM(NO_OF_COPIES) Total_Available
FROM BOOKS
WHERE AVAILABILITY_OF_BOOK<>'NO'
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

TOTAL_AVAILABLE

53

1 rows returned in 0.00 seconds

[CSV Export](#)**Subquery:**

Qn. No. 1: Display the all information of the students who studying in the university as a foreign student.

```
SELECT *
FROM STUDENTS
WHERE CITY IN (SELECT CITY
FROM CITY_INFO
WHERE COUNTRY<>'BANGLADESH')
```

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```
SELECT *
FROM STUDENTS
WHERE CITY IN (SELECT CITY
FROM CITY_INFO
WHERE COUNTRY<>'BANGLADESH')
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

S_ID	S_NAME	CGPA	CREDIT_COMPLETED	S_EMAIL	CITY
1105	PAUL ROHIT	3.3	48	ROHIT@GMAIL.COM	DELHI
1106	LAMICHAN SANDIP	4	16	LAMICHAN@GMAIL.COM	KATHMANDU

2 rows returned in 0.02 seconds

[CSV Export](#)

Qn. No. 2: Display the maximum copied book's name.

```
SELECT BOOK_NAME
FROM BOOKS
WHERE NO_OF_COPIES= (SELECT MAX(NO_OF_COPIES)
FROM BOOKS)
```

☒ Autocommit Display 5000 ▼

```
SELECT BOOK_NAME
FROM BOOKS
WHERE NO_OF_COPIES= (SELECT MAX(NO_OF_COPIES)
FROM BOOKS)
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

BOOK_NAME
DIGITAL FUNDAMENTAL

1 rows returned in 0.00 seconds

[CSV Export](#)

Qn. No. 3: Display all the teachers name and join date who joined before 'HOSSAIN MD ZAKIR'.

```
SELECT T_NAME, JOIN_DATE
```

```
FROM TEACHERS
```

```
WHERE JOIN_DATE < (SELECT JOIN_DATE FROM TEACHERS WHERE T_NAME='HOSSAIN MD ZAKIR')
```

☒ Autocommit Display 5000 ▼

```
SELECT T_NAME, JOIN_DATE
FROM TEACHERS
WHERE JOIN_DATE < (SELECT JOIN_DATE FROM TEACHERS WHERE T_NAME='HOSSAIN MD ZAKIR')
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

T_NAME	JOIN_DATE
HASSAN MAHMUD	17-DEC-08
KHAN MUSTOFA	23-NOV-10
RANI PARBOTI	10-JAN-13
SHUVRO ALLEN	13-MAY-07

4 rows returned in 0.02 seconds

[CSV Export](#)

Joining:

Qn. No. 1: Display the students who have class in room number 5101.

```
SELECT SVC.S_ID,S.TIMING
```

```
FROM S_VS_COURSE SVC, SCHEDULE S
```

WHERE (SVC.COURSE_ID = S.COURSE_ID) AND S.ASSIGNED_ROOM=5101

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SELECT SVC.S_ID,S.TIMING
FROM S_VS_COURSE SVC, SCHEDULE S
WHERE (SVC.COURSE_ID = S.COURSE_ID) AND S.ASSIGNED_ROOM=5101

Results Explain Describe Saved SQL History

S_ID	TIMING
1101	8:00-11:00
1104	12:00-1:30

2 rows returned in 0.01 seconds [CSV Export](#)

Qn. No. 2: Display the students and the teachers who have borrowed the same books.

```
SELECT S_ID, T_ID  
FROM S_VS_BOOKS S, T_VS_BOOKS T  
WHERE S.BOOK_ID=T.BOOK_ID;
```

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SELECT S_ID, T_ID
FROM S_VS_BOOKS S, T_VS_BOOKS T
WHERE S.BOOK_ID=T.BOOK_ID;

Results Explain Describe Saved SQL History

S_ID	T_ID
1101	101
1102	102
1103	103
1104	104
1105	105
1106	106

6 rows returned in 0.00 seconds [CSV Export](#)

Qn. No. 3: Display the students who have failed to return the borrowed books within the due date

```
SELECT DISTINCT S.S_ID  
FROM S_VS_BOOKS S, S_VS_BOOKS B  
WHERE S.DUE_DATE<B.RETURN_DATE
```

☒ Autocommit Display 10 ▾

```
SELECT DISTINCT S.S_ID
FROM S_VS_BOOKS S, S_VS_BOOKS B
WHERE S.DUE_DATE<B.RETURN_DATE
```

Results Explain Describe Saved SQL History

S_ID
1103
1104
1106

3 rows returned in 0.00 seconds

[CSV Export](#)**View:**

Qn. No. 1: Create a view that contains the passed (min pass CGPA 2.00) of student's information.

```
CREATE VIEW STUDENT_VU_PASSED
AS SELECT S_ID,S_NAME,CGPA
```

FROM STUDENTS
WHERE CGPA>2.00

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Home > SQL > **SQL Commands**

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```
CREATE VIEW STUDENT_VU_PASSED  
AS SELECT S_ID,S_NAME,CGPA  
FROM STUDENTS  
WHERE CGPA>2.00  
  
SELECT * FROM STUDENT_VU_PASSED
```

Results Explain Describe Saved SQL History

S_ID	S_NAME	CGPA
1101	RAHAMAN MINHAZUR	3.5
1102	HASAN MD NAZMUL	3.9
1103	HOSSAIN JAMAL	2.7
1104	RAHAMAN ANISUR	3.3
1105	PAUL ROHIT	3.3
1106	LAMICHAN SANDIP	4

6 rows returned in 0.00 seconds

[CSV Export](#)

Qn. No. 2: Create a view to show the borrowed books name and books id of student id=1101.

```
CREATE VIEW BORROW_VU_INFO_STD  
AS  
SELECT SB.BOOK_ID, BOOKS.BOOK_NAME  
FROM S_VS_BOOKS SB
```

```
INNER JOIN BOOKS
ON SB.BOOK_ID = BOOKS.BOOK_ID
WHERE SB.S_ID=1101
```

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```
CREATE VIEW BORROW_VU_INFO_STD
AS
SELECT SB.BOOK_ID, BOOKS.BOOK_NAME
FROM S_VS_BOOKS SB
INNER JOIN BOOKS
ON SB.BOOK_ID = BOOKS.BOOK_ID
WHERE SB.S_ID=1101

select * from BORROW_VU_INFO_STD
```

Results Explain Describe Saved SQL History

BOOK_ID	BOOK_NAME
9101	LET US C

1 rows returned in 0.00 seconds [CSV Export](#)

Qn. No. 3: Display the teachers all information along with their respective skill.

```
CREATE VIEW TEACHERS_VU_INFO
AS
SELECT T.*,TS.SKILLS
```

```
FROM TEACHERS T,T_SKILLS TS
WHERE T.T_ID=TS.T_ID
```

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User: SCOTT

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
CREATE VIEW TEACHERS_VU_INFO
AS
SELECT T.*,TS.SKILLS
FROM TEACHERS T,T_SKILLS TS
WHERE T.T_ID=TS.T_ID
```

```
select * from TEACHERS_VU_INFO
```

Results Explain Describe Saved SQL History

T_ID	T_NAME	JOIN_DATE	PRIMARY_PHO_NO	T_EMAIL	SKILLS
101	HASSAN MAHMUD	17-DEC-08	1386479254	DR.HASAN@GMAIL.COM	JAVA
102	KHAN MUSTOFA	23-NOV-10	1486478964	KHAN@GMAIL.COM	PHP
103	HOSSAIN MD ZAKIR	18-OCT-16	1786479254	ZAKIR@GMAIL.COM	ASP .NET
104	RANI PARBOTI	10-JAN-13	1589679254	PARBOTI@GMAIL.COM	DATABASE
105	SHUVRO ALLEN	13-MAY-07	1886464254	SHUVRO@GMAIL.COM	LINUX
106	MAHMUD HAYAT	07-JUL-20	1986489254	MAHMUD@GMAIL.COM	NETWORK SECURITY

6 rows returned in 0.00 seconds

[CSV Export](#)

Synonym:

Qn. No. 1: Create a synonym or another name of STUDENT_VU_PASSED

```
CREATE SYNONYM ST_PASS
FOR STUDENT_VU_PASSED
```

☒ Autocommit Display 5000 ▼

```
CREATE SYNONYM ST_PASS  
FOR STUDENT_VU_PASSED
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Synonym created.

0.01 seconds

Qn. No. 2: Create a synonym or another name of existing object BORROW_VU_INFO_STD

```
CREATE SYNONYM B_INFO  
FOR BORROW_VU_INFO_STD
```

☒ Autocommit Display 5000 ▼

```
CREATE SYNONYM B_INFO  
FOR BORROW_VU_INFO_STD
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Synonym created.

0.01 seconds

Qn. No. 3: Create a synonym or another name of existing TEACHERS_VU_INFO

```
CREATE SYNONYM T_INFO  
FOR TEACHERS_VU_INFO
```


☒ Autocommit Display 5000 ▼

```
CREATE SYNONYM T_INFO  
FOR TEACHERS_VU_INFO
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Synonym created.

0.01 seconds

Conclusion

It has been a great pleasure for us to work on this exciting and challenging project. This project proved good for us as it provided practical knowledge of not only Programming language, SQL server, OOAD, but also about all handling procedure related with “UNIVERSITY MANAGEMENT SYSTEM”. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

In final term we also want to modify our project for the future work. We hope this work will help us in our future work. There will be a system for downloading Admission form and data table for new applicant. There will be a notice section it will show every updated notice given by University authorities.