

Problem Statement

In this project, we aim to design a database management system to store information on an Online students' portal. This will manage the students' information during online semester.

The database stores unique log in information for each student which helps them to access the portal. Every student may provide their profile information which includes Name, roll number, current course pursued by them. The database also includes the information about the subject opted by individual student. This may also include the credits as well the useful materials the students may require for their academics.

The database is made useful for the faculties. The contact details of faculties along with their profile can be maintained using this database. The database also records the Attendance (in percentage) maintained for the faculty reference.

The database also contains the information regarding the exams conducted throughout the academic year. This may include both minor tests as well as major exams. The database also allows students to submit their Assignments for different subjects before the respective deadlines. This may also include Lab assignments.

The database records the date of submission for the late submitters. The students may also showcase their achievements by putting forward the projects made by them in groups or individually. A student may have made multiple projects. Finally, this database aims to efficiently manages all the resources for smooth functioning of online semester.

TABLES

STUDENT

ATTRIBUTE	DATATYPE	CONSTRAINTS
ROLL NUMBER	NUMBER	PRIMARY_KEY NOT NULL
USERID	VARCHAR(40)	FOREIGN_KEY NOT NULL
NAME	VACHAR(40)	NOT NULL
UG/PG	VARCHAR(2)	NOT NULL

PROJECT

ATTRIBUTE	DATATYPE	CONSTRAINTS
PROJECT NAME	VARCHAR(40)	PRIMARY_KEY NOT NULL
SUBJECT	VARCHAR(40)	NOT NULL
YEAR	DATE	NOT NULL

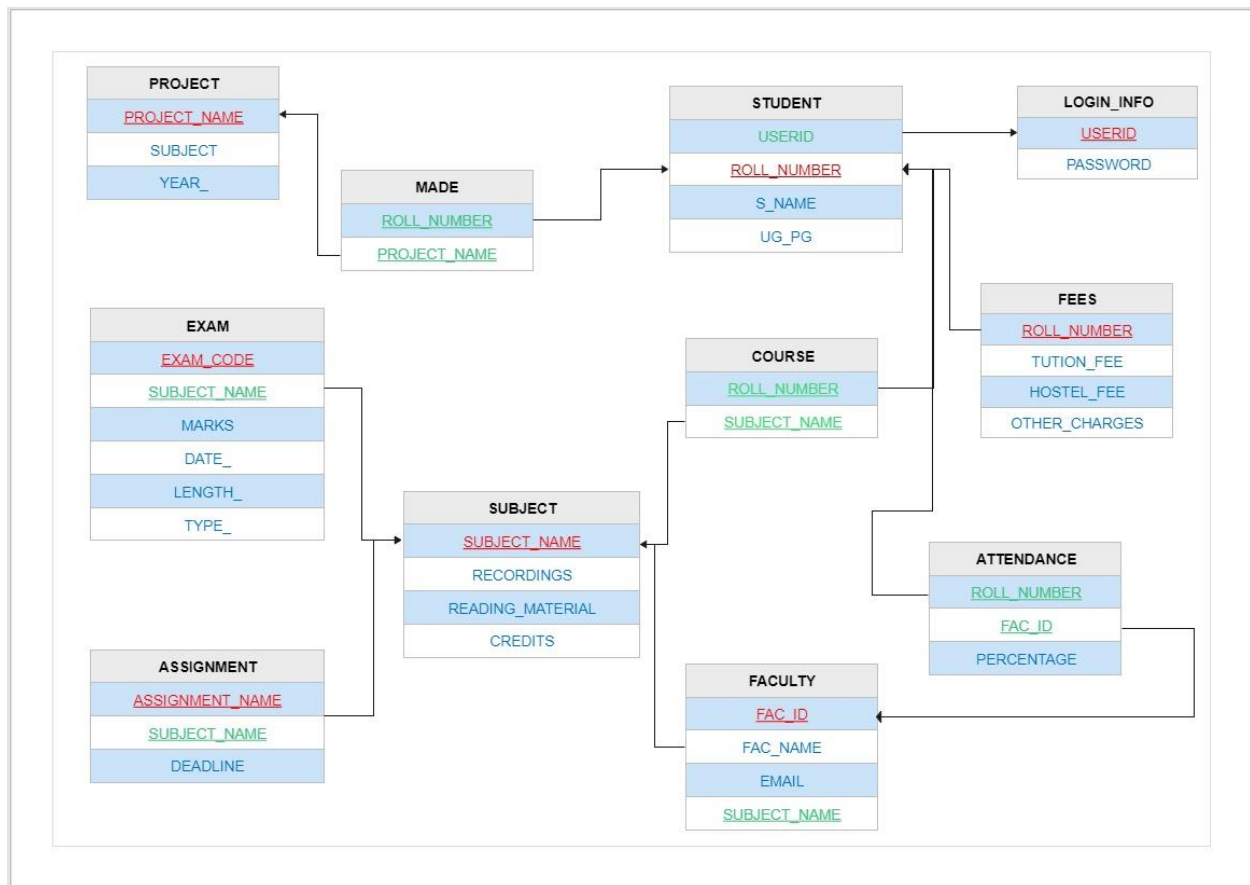
ATTENDANCE

ATTRIBUTE	DATATYPE	CONSTRAINTS
ROLL NUMBER	NUMBER	PRIMARY_KEY NOT NULL
FAC_ID	NUMBER	PRIMAR_KEY NOT NULL
PERCENTAGE	FLOAT(5)	NOT NULL

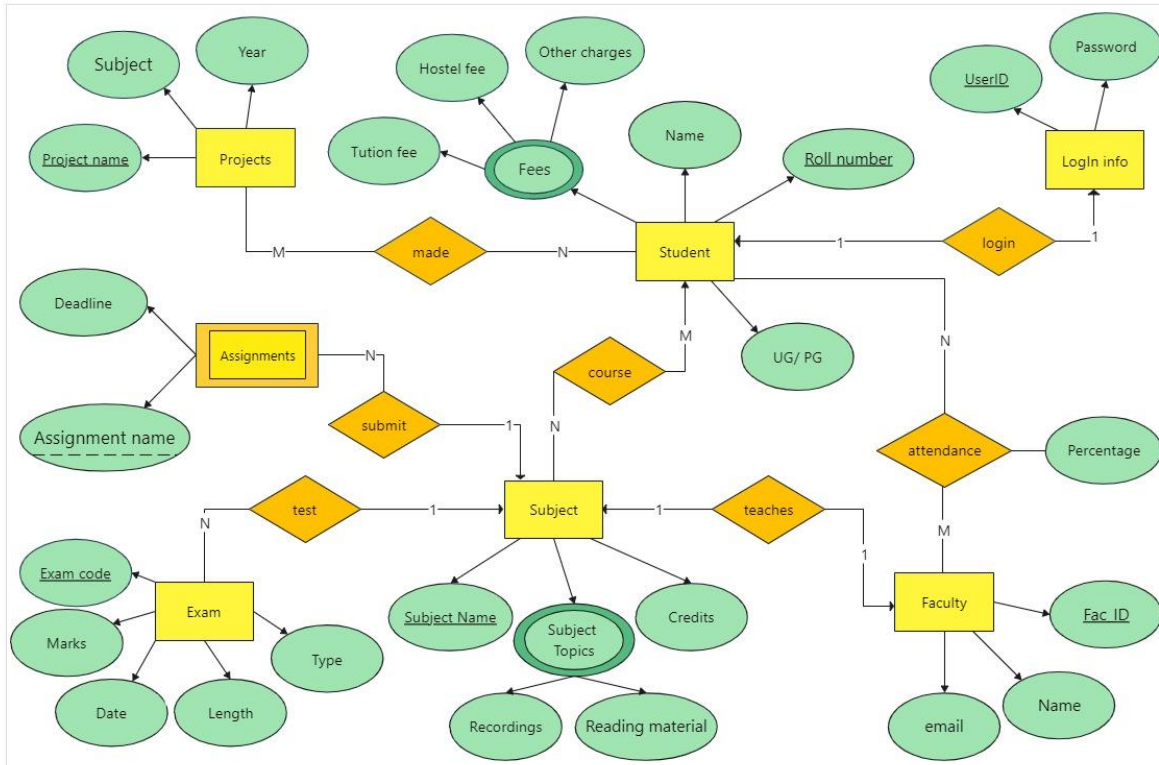
EXAM

ATTRIBUTE	DATATYPE	CONSTRAINTS
EXAMCODE	VARCHAR(10)	PRIMARY_KEY NOT NULL
NAME	VARCHAR(20)	NOT NULL
DATE	DATE	NOT NULL
TYPE	VARCHAR(6)	NOT NULL
DURATION	TIME	NOT NULL

RELATIONSHIP SCHEMA



ER DIAGRAM



SQL OPERATIONS

Creation of Tables

CREATE TABLE **LOGIN_INFO**

```
(  USERID VARCHAR(40)  PRIMARY KEY NOT NULL,  
  PASSWORD_ VARCHAR(30) NOT NULL  
);
```

CREATE TABLE **STUDENT**

```
(  USERID  VARCHAR2(40)  NOT NULL,  
  S_NAME VARCHAR2(40) NOT NULL,  
  ROLL_NUMBER NUMBER PRIMARY KEY NOT NULL,  
  UG_PG      VARCHAR(2) NOT NULL,  
  FOREIGN KEY (USERID) REFERENCES LOGIN_INFO(USERID)  
);
```

CREATE TABLE **FEES**

```
(  ROLL_NUMBER NUMBER NOT NULL,  
  FOREIGN KEY (ROLL_NUMBER) REFERENCES STUDENT(ROLL_NUMBER),  
  TUTION_FEE NUMBER NOT NULL,  
  HOSTEL_FEE NUMBER NOT NULL,  
  OTHER_CHARGES NUMBER NOT NULL,  
  PRIMARY KEY (ROLL_NUMBER)  
);
```

CREATE TABLE **SUBJECT**

```
(  SUBJECT_NAME VARCHAR(40)  PRIMARY KEY NOT NULL,  
  RECORDINGS VARCHAR(100) NOT NULL,  
  READING_MATERIAL VARCHAR(100) NOT NULL,  
  CREDITS SMALLINT NOT NULL  
);
```

CREATE TABLE **EXAM**

```
(  SUBJECT VARCHAR(40) NOT NULL,  
  EXAM_CODE VARCHAR(6) PRIMARY KEY NOT NULL,  
  MARKS NUMBER NOT NULL,  
  EXAM_DATE DATE NOT NULL,  
  LENGHT VARCHAR(7) NOT NULL,  
  TYPE_ VARCHAR(7) NOT NULL,  
  FOREIGN KEY (SUBJECT) REFERENCES SUBJECT(SUBJECT_NAME)  
);
```

```
CREATE TABLE COURSE
(  ROLL_NUMBER NUMBER NOT NULL,
   SUBJECT_NAME VARCHAR2(40) NOT NULL,
   FOREIGN KEY (ROLL_NUMBER) REFERENCES STUDENT(ROLL_NUMBER),
   FOREIGN KEY (SUBJECT_NAME) REFERENCES SUBJECT(SUBJECT_NAME),
   PRIMARY KEY(SUBJECT_NAME,ROLL_NUMBER)
);
```

```
CREATE TABLE PROJECTS
(  PROJECT_NAME VARCHAR2(40) PRIMARY KEY NOT NULL,
   SUBJECT VARCHAR2(40) NOT NULL,
   YEAR_ INT NOT NULL
);
```

```
CREATE TABLE MADE
(  ROLL_NUMBER NUMBER NOT NULL,
   PROJECT_NAME VARCHAR2(40) NOT NULL,
   FOREIGN KEY (ROLL_NUMBER) REFERENCES STUDENT(ROLL_NUMBER),
   FOREIGN KEY (PROJECT_NAME) REFERENCES PROJECTS(PROJECT_NAME)
);
```

```
CREATE TABLE FACULTY
(  FAC_ID NUMBER PRIMARY KEY NOT NULL,
   FAC_NAME VARCHAR(20) NOT NULL,
   EMAIL VARCHAR(100) NOT NULL,
   SUBJECT_NAME VARCHAR(40) NOT NULL,
   FOREIGN KEY (SUBJECT_NAME) REFERENCES SUBJECT(SUBJECT_NAME)
);
```

```
CREATE TABLE ATTENDANCE
(  ROLL_NUMBER NUMBER NOT NULL,
   FAC_ID NUMBER NOT NULL,
   PERCENTAGE NUMBER NOT NULL,
   FOREIGN KEY (ROLL_NUMBER) REFERENCES STUDENT(ROLL_NUMBER),
   FOREIGN KEY (FAC_ID) REFERENCES FACULTY(FAC_ID)
);
```

Insertion of Values

```
INSERT INTO LOGIN_INFO VALUES('singh_197110@student.nitw.ac.in',
'SINGH0123');
INSERT INTO LOGIN_INFO VALUES('bhatia_197123@student.nitw.ac.in',
'BHATIA4567');
INSERT INTO LOGIN_INFO VALUES('patel_197242@student.nitw.ac.in',
'PATEL1430');
INSERT INTO LOGIN_INFO VALUES('pradhan_196125@student.nitw.ac.in',
'PRAD43210');
INSERT INTO LOGIN_INFO VALUES('verma_196137@student.nitw.ac.in',
'ADITYA6789');
INSERT INTO LOGIN_INFO VALUES('sahani_198209@student.nitw.ac.in',
'SAHANI9876');
INSERT INTO LOGIN_INFO VALUES ('chhaje_197238@student.nitw.ac.in',
'CHHAJED7238');
INSERT INTO LOGIN_INFO VALUES ('balai_197254@student.nitw.ac.in',
'BALAI7254');
INSERT INTO LOGIN_INFO VALUES ('mishra_197258@student.nitw.ac.in',
'MISHRA7258');
INSERT INTO LOGIN_INFO VALUES ('johar_197264@student.nitw.ac.in',
'JOHAR7264');
INSERT INTO LOGIN_INFO VALUES('khan_198101@student.nitw.ac.in','KHAN8101');
```

```
INSERT INTO STUDENT VALUES ('singh_197110@student.nitw.ac.in','NAVJOT
SINGH',197110,'UG');
INSERT INTO STUDENT VALUES ('bhatia_197123@student.nitw.ac.in','TANMAY
BHATIYA',197123,'UG');
INSERT INTO STUDENT VALUES ('patel_197242@student.nitw.ac.in','HARSH
PATEL',197242,'UG');
INSERT INTO STUDENT VALUES ('pradhan_196125@student.nitw.ac.in','BINOD
PRADHAN',196125,'PG');
INSERT INTO STUDENT VALUES ('verma_196137@student.nitw.ac.in','RAM GOPAL
VERMA',196137,'PG');
INSERT INTO STUDENT VALUES ('sahani_198209@student.nitw.ac.in','AMANDEEP
SAHANI',198209,'PG');
INSERT INTO STUDENT VALUES ('chhaje_197238@student.nitw.ac.in','RAICHAND
CHHAJED',197238,'UG');
INSERT INTO STUDENT VALUES ('balai_197254@student.nitw.ac.in','ANAND
BALAI',197254,'UG');
INSERT INTO STUDENT VALUES ('khan_198101@student.nitw.ac.in','GENGHIS
KHAN',198101,'PG');
INSERT INTO STUDENT VALUES ('mishra_197258@student.nitw.ac.in','PRATIK
MISHRA',197258,'UG');
INSERT INTO STUDENT VALUES ('johar_197264@student.nitw.ac.in','RUHI
JOHAR',197264,'UG');
```

```

INSERT INTO FEES VALUES(197110, 132000, 47000, 5200);
INSERT INTO FEES VALUES(197123, 132000, 48000, 5000);
INSERT INTO FEES VALUES(197242, 325000, 50000, 5250);
INSERT INTO FEES VALUES(196125, 100000, 10000, 2100);
INSERT INTO FEES VALUES(196137, 325000, 50000, 5100);
INSERT INTO FEES VALUES(198209, 132000, 50000, 5000);
INSERT INTO FEES VALUES(197238, 100000, 10000, 2100);
INSERT INTO FEES VALUES(197254, 50000, 10000, 1000);
INSERT INTO FEES VALUES(198101, 325000, 50000, 5100);
INSERT INTO FEES VALUES(197258, 132000, 48000, 5000);
INSERT INTO FEES VALUES(197264, 50000, 10000, 1000);

```

```

INSERT INTO SUBJECT VALUES('INTEGRATED CIRCUITS',
'https://drive.google.com/drive/folders/1JNyBtJ', 'https://second-
lms.nitwcloud.in/moodle/pluginfile.php/content/1/bjeswb1.pdf',3);
INSERT INTO SUBJECT VALUES('MODELLING THEORY',
'https://professional.mit.edu/modeling-and-optimization-machine-
learning', 'https://drive.google.com/file/d/1s5govFb6sodB7jEETkWD2bw/view',3);
INSERT INTO SUBJECT VALUES('DIGITAL ELECTRONICS',
'https://www.tinkercad.com/dashboard?type=circuits', 'https://drive.google.com
/file/d/2xXErGeeb_Q/view',3);
INSERT INTO SUBJECT VALUES('OBJECT ORIENTED PROGRAMMING',
'https://drive.google.com/file/d/1ZHDbmM4uk7InX/view', 'https://second-
lms.nitwcloud.in/moodle/mod/url/view.php',3);
INSERT INTO SUBJECT VALUES('DATA STRUCTURES',
'https://drive.google.com/drive/folders/1JNyBtJ', 'https://lms.moodle.in/1/mod
/url/view.php/bjeswb1.mov',3);
INSERT INTO SUBJECT VALUES('DATA STRUCTURES LAB',
'https://drive.google.com/drive/folders/bDS14K', 'https://lms.moodle.in/1/mod/
url/view.php/bjeswb1.mov',2);
INSERT INTO SUBJECT VALUES('DATA MANAGEMENT',
'https://drive.google.com/drive/folders/1FC1u0K', 'https://second-
lms.nitwcloud.in/moodle/pluginfile.php/content/1/bjeswb1.pdf',3);
INSERT INTO SUBJECT VALUES('DATA MANAGEMENT LAB',
'https://drive.google.com/drive/folders/Gr8qTH', 'https://lms.moodle.in/1/mod/
url/view.php/bjeswb1.mov',1);
INSERT INTO SUBJECT VALUES('COMPUTER ARCHITECTURE',
'https://drive.google.com/drive/folders/W3rDEd', 'https://lms.moodle.in/1/mod/
url/view.php/bjeswb1.mov',1);
INSERT INTO SUBJECT VALUES('NETWORK ANALYSIS',
'https://drive.google.com/drive/folders/UsD0e2W', 'https://lms.moodle.in/1/mod
/url/view.php/bjeswb1.mov',2);

```

```

INSERT INTO EXAM VALUES ('DATA STRUCTURES LAB', 'DSL100',10, '30-APR-2021', '20
MIN', 'QUIZ');

```



```

INSERT INTO EXAM VALUES ('DATA STRUCTURES', 'DSA101', 50, '10-MAY-2021', '3
HRS', 'END SEM');
INSERT INTO EXAM VALUES ('DATA MANAGEMENT', 'DBM302', 20, '23-APR-2021', '30
MIN', 'MINOR');
INSERT INTO EXAM VALUES ('OBJECT ORIENTED PROGRAMMING', 'OOP201', 30, '28-FEB-
2021', '2 HRS', 'MID SEM');
INSERT INTO EXAM VALUES ('MODELLING THEORY', 'MOT321', 15, '30-JAN-2021', '20
MIN', 'MINOR');
INSERT INTO EXAM VALUES ('MODELLING THEORY', 'MOT321', 15, '10-FEB-2021', '20
MIN', 'MINOR');
INSERT INTO EXAM VALUES ('INTEGRATED CIRCUITS', 'ICA105', 50, '30-MAY-2021', '3
HRS', 'END SEM');
INSERT INTO EXAM VALUES ('COMPUTER ARCHITECTURE', 'CA208', 50, '17-MAY-2021', '3
HRS', 'END SEM');
INSERT INTO EXAM VALUES ('NETWORK ANALYSIS', 'NA230', 50, '12-MAY-2021', '3
HRS', 'END SEM');
INSERT INTO EXAM VALUES ('DIGITAL ELECTRONICS', 'DLD111', 50, '25-MAY-2021', '3
HRS', 'END SEM');

```

```

INSERT INTO ASSIGNMENT VALUES('DATA STRUCTURES LAB', 'STACKS AND QUEUES', '20-
OCT-2020');
INSERT INTO ASSIGNMENT VALUES('DATA MANAGEMENT LAB', 'PL/SQL', '20-APR-2021');
INSERT INTO ASSIGNMENT VALUES('OBJECT ORIENTED PROGRAMMING', 'INTERFACES', '26-
FEB-2021');
INSERT INTO ASSIGNMENT VALUES('MODELLING THEORY', 'GENETIC ALGORITHMS', '16-
MAR-2021');
INSERT INTO ASSIGNMENT VALUES('INTEGRATED CIRCUITS', 'WROKING OF IC555', '11-
JAN-2021');
INSERT INTO ASSIGNMENT VALUES('DIGITAL ELECTRONICS', 'REGISTER CIRCUITS', '10-
DEC-2020');
INSERT INTO ASSIGNMENT VALUES('COMPUTER ARCHITECTURE', 'PIPELINING', '21-APR-
2020');
INSERT INTO ASSIGNMENT VALUES('DATA STRUCTURES', 'HEAPS', '12-DEC-2020');
INSERT INTO ASSIGNMENT VALUES('DATA MANAGEMENT', 'NORMALSATION', '20-APR-
2021');

```

```

INSERT INTO COURSE VALUES(197110, 'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(197110, 'OBJECT ORIENTED PROGRAMMING');
INSERT INTO COURSE VALUES(197110, 'DATA STRUCTURES');
INSERT INTO COURSE VALUES(197123, 'OBJECT ORIENTED PROGRAMMING');
INSERT INTO COURSE VALUES(197123, 'DATA STRUCTURES LAB');
INSERT INTO COURSE VALUES(197123, 'MODELLING THEORY');
INSERT INTO COURSE VALUES(197242, 'COMPUTER ARCHITECTURE');
INSERT INTO COURSE VALUES(197242, 'DATA MANAGEMENT');
INSERT INTO COURSE VALUES(196125, 'DIGITAL ELECTRONICS');
INSERT INTO COURSE VALUES(196125, 'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(196125, 'OBJECT ORIENTED PROGRAMMING');
INSERT INTO COURSE VALUES(196137, 'DATA MANAGEMENT LAB');

```

```

INSERT INTO COURSE VALUES(196137,'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(196137,'NETWORK ANALYSIS');
INSERT INTO COURSE VALUES(198209,'DATA STRUCTURES LAB');
INSERT INTO COURSE VALUES(198209,'MODELLING THEORY');
INSERT INTO COURSE VALUES(198209,'COMPUTER ARCHITECTURE');
INSERT INTO COURSE VALUES(198209,'DATA MANAGEMENT');
INSERT INTO COURSE VALUES(197238,'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(197238,'NETWORK ANALYSIS');
INSERT INTO COURSE VALUES(197238,'COMPUTER ARCHITECTURE');
INSERT INTO COURSE VALUES(197254,'DATA MANAGEMENT');
INSERT INTO COURSE VALUES(197254,'DIGITAL ELECTRONICS');
INSERT INTO COURSE VALUES(197254,'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(198101,'DATA MANAGEMENT LAB');
INSERT INTO COURSE VALUES(198101,'DATA STRUCTURES LAB');
INSERT INTO COURSE VALUES(198101,'MODELLING THEORY');
INSERT INTO COURSE VALUES(197258,'DATA MANAGEMENT');
INSERT INTO COURSE VALUES(197258,'DATA STRUCTURES');
INSERT INTO COURSE VALUES(197258,'OBJECT ORIENTED PROGRAMMING');
INSERT INTO COURSE VALUES(197264,'OBJECT ORIENTED PROGRAMMING');
INSERT INTO COURSE VALUES(197264,'INTEGRATED CIRCUITS');
INSERT INTO COURSE VALUES(197264,'MODELLING THEORY');

```

```

INSERT INTO PROJECTS VALUES('Running Time for Sorting Problem','Algorithms Analysis', '2018');
INSERT INTO PROJECTS VALUES('Facial Emotion Recognition','Application of Deep Learning', '2020');
INSERT INTO PROJECTS VALUES('Honest Review Website','Web Development and Designing', '2017');
INSERT INTO PROJECTS VALUES('Aquarium Simulation using Graphics','Computer Graphics and Applications', '2020');
INSERT INTO PROJECTS VALUES('Stack Based Text Editor','Data Structures and Algorithms', '2017');
INSERT INTO PROJECTS VALUES('Graphical Evaluation Review Technique','Network analysis: Project Management', '2020');
INSERT INTO PROJECTS VALUES('Language Translator in Python Project','Deep Learning', '2019');
INSERT INTO PROJECTS VALUES('Chatbot Using Deep Learning','Deep Learning', '2021');
INSERT INTO PROJECTS VALUES('SMS Controlled Robot','Electronics and Communication with AI', '2018');

```

```

INSERT INTO MADE VALUES(197110, 'SMS Controlled Robot');
INSERT INTO MADE VALUES(197110, 'Stack Based Text Editor');
INSERT INTO MADE VALUES(197123, 'Aquarium Simulation using Graphics');
INSERT INTO MADE VALUES(197123, 'Running Time for Sorting Problem');
INSERT INTO MADE VALUES(197242, 'Stack Based Text Editor');
INSERT INTO MADE VALUES(197242, 'Honest Review Website');
INSERT INTO MADE VALUES(197242, 'Graphical Evaluation Review Technique');

```

```

INSERT INTO MADE VALUES(196125, 'Aquarium Simulation using Graphics');
INSERT INTO MADE VALUES(196137, 'Language Translator in Python Project');
INSERT INTO MADE VALUES(196137, 'SMS Controlled Robot');
INSERT INTO MADE VALUES(196137, 'Honest Review Website');
INSERT INTO MADE VALUES(198209, 'Chatbot Using Deep Learning');
INSERT INTO MADE VALUES(198209, 'Facial Emotion Recognition');
INSERT INTO MADE VALUES(198209, 'SMS Controlled Robot');
INSERT INTO MADE VALUES(197238, 'Facial Emotion Recognition');
INSERT INTO MADE VALUES(197238, 'Language Translator in Python Project');
INSERT INTO MADE VALUES(197238, 'Graphical Evaluation Review Technique');
INSERT INTO MADE VALUES(197254, 'Facial Emotion Recognition');
INSERT INTO MADE VALUES(198101, 'Stack Based Text Editor');
INSERT INTO MADE VALUES(198101, 'Running Time for Sorting Problem');
INSERT INTO MADE VALUES(198101, 'Aquarium Simulation using Graphics');
INSERT INTO MADE VALUES(197258, 'Running Time for Sorting Problem');
INSERT INTO MADE VALUES(197258, 'Honest Review Website');
INSERT INTO MADE VALUES(197258, 'Chatbot Using Deep Learning');
INSERT INTO MADE VALUES(197264, 'SMS Controlled Robot');
INSERT INTO MADE VALUES(197264, 'Aquarium Simulation using Graphics');

```

```

INSERT INTO FACULTY VALUES (210078, 'RAMESH VERMA',
'r_verma@nitw.ac.in', 'NETWORK ANALYSIS');
INSERT INTO FACULTY VALUES (210031, 'NEHA SAXENA',
'n_saxena@nitw.ac.in', 'MODELLING THEORY');
INSERT INTO FACULTY VALUES (210052, 'SHREYA KOHLI',
'p_kohli@nitw.ac.in', 'COMPUTER ARCHITECTURE');
INSERT INTO FACULTY VALUES (210047, 'MAHENDRA PAL', 'm_pal@nitw.ac.in', 'DIGITAL
ELECTRONICS');
INSERT INTO FACULTY VALUES (210024, 'KAPIL RANA ',
'k_rana@nitw.ac.in', 'INTEGRATED CIRCUITS');
INSERT INTO FACULTY VALUES (210009, 'SEBASTIAN BATTENY',
's_batteny@nitw.ac.in', 'DATA STRUCTURES');
INSERT INTO FACULTY VALUES (210010, 'MARK STEWART',
'm_stewart@nitw.ac.in', 'DATA STRUCTURES LAB');
INSERT INTO FACULTY VALUES (210066, 'RAMA SINDE', 'r_sinde@nitw.ac.in', 'OBJECT
ORIENTED PROGRAMMING');
INSERT INTO FACULTY VALUES (210042, 'SHEKHAR KHURESHI',
's_khureshi@nitw.ac.in', 'DATA MANAGEMENT');
INSERT INTO FACULTY VALUES (210090, 'SHAKSHI SEN', 's_sen@nitw.ac.in', 'DATA
MANAGEMENT');

```

```

INSERT INTO ATTENDANCE VALUES (197110, 210078, 88);
INSERT INTO ATTENDANCE VALUES (197110, 210047, 63);
INSERT INTO ATTENDANCE VALUES (197123, 210024, 94);
INSERT INTO ATTENDANCE VALUES (197123, 210042, 85);
INSERT INTO ATTENDANCE VALUES (197123, 210090, 59);
INSERT INTO ATTENDANCE VALUES (197242, 210052, 90);
INSERT INTO ATTENDANCE VALUES (197242, 210031, 88);

```

```
INSERT INTO ATTENDANCE VALUES (196125, 210009, 58);
INSERT INTO ATTENDANCE VALUES (196125, 210010, 85);
INSERT INTO ATTENDANCE VALUES (196137, 210042, 80);
INSERT INTO ATTENDANCE VALUES (196137, 210090, 61);
INSERT INTO ATTENDANCE VALUES (196137, 210024, 89);
INSERT INTO ATTENDANCE VALUES (198209, 210031, 94);
INSERT INTO ATTENDANCE VALUES (197238, 210066, 83);
INSERT INTO ATTENDANCE VALUES (197238, 210052, 96);
INSERT INTO ATTENDANCE VALUES (197254, 210042, 87);
INSERT INTO ATTENDANCE VALUES (197254, 210090, 91);
INSERT INTO ATTENDANCE VALUES (198101, 210078, 80);
INSERT INTO ATTENDANCE VALUES (197258, 210009, 93);
INSERT INTO ATTENDANCE VALUES (197258, 210010, 86);
INSERT INTO ATTENDANCE VALUES (197264, 210024, 78);
INSERT INTO ATTENDANCE VALUES (197264, 210047, 92);
```

SQL QUERIES

1.Display the details of the student profile with the entered user id and password

```
SELECT S_NAME, S.ROLL_NUMBER, UG_PG, TUTION_FEE, HOSTEL_FEE, OTHER_CHARGES
FROM ((STUDENT S INNER JOIN LOGIN_INFO L ON S.USERID=L.USERID)
INNER JOIN FEES F ON S.ROLL_NUMBER=F.ROLL_NUMBER)
WHERE (L.USERID='patel_197242@student.nitw.ac.in' AND
L.PASSWORD_='PATEL1430');
```

S_NAME	ROLL_NUMBER	UG_PG	TUTION_FEE	HOSTEL_FEE	OTHER_CHARGES
1 HARSH PATEL	197242	UG	325000	50000	5250

Wrong password entered:

```
SELECT S_NAME, S.ROLL_NUMBER, UG_PG, TUTION_FEE, HOSTEL_FEE, OTHER_CHARGES
FROM ((STUDENT S INNER JOIN LOGIN_INFO L ON S.USERID=L.USERID)
INNER JOIN FEES F ON S.ROLL_NUMBER=F.ROLL_NUMBER)
WHERE (L.USERID='patel_197242@student.nitw.ac.in' AND L.PASSWORD_=
'PATEL1234');
```

S_NAME	ROLL_N...	UG_PG	TUTION...	HOSTEL...	OTHER_...
--------	-----------	-------	-----------	-----------	-----------

2.Show all the details of all the projects made by roll number 197258.

```
SELECT S.ROLL_NUMBER, P.PROJECT_NAME, P.SUBJECT, P.YEAR_
FROM ((STUDENT S INNER JOIN MADE M ON S.ROLL_NUMBER= M.ROLL_NUMBER)
INNER JOIN PROJECTS P ON P.PROJECT_NAME=M.PROJECT_NAME)
WHERE S.ROLL_NUMBER=197258;
```

ROLL_NU...	PROJECT_NAME	SUBJECT	YEAR_
1 197258	Running Time for Sorting Problem	Algorithms Analysis	2018
2 197258	Honest Review Website	Web Development and Designing	2017
3 197258	Chatbot Using Deep Learning	Deep Learning	2021

3.Display the details of all the students taught by faculty with faculty id 210047.

```
SELECT S.ROLL_NUMBER, S.S_NAME, F.SUBJECT_NAME, S.UG_PG
FROM ((STUDENT S INNER JOIN ATTENDANCE A ON S.ROLL_NUMBER= A.ROLL_NUMBER)
INNER JOIN FACULTY F ON F.FAC_ID= A.FAC_ID)
WHERE F.FAC_ID= 210047;
```

	ROLL_NUMBER	S_NAME	SUBJECT_NAME	UG_PG
1	197110	NAVJOT SINGH	DIGITAL ELECTRONICS	UG
2	197264	RUHI JOHAR	DIGITAL ELECTRONICS	UG

4.The minimum attendance percentage a student must maintain to be able to appear for the exams is 80%. List the names of the students along with their attendance percentages who are NOT eligible for exam. Also mention the corresponding faculty name and the subject name.

```
SELECT S.ROLL_NUMBER, S_NAME, PERCENTAGE, FAC_NAME, SUBJECT_NAME
FROM ((STUDENT S INNER JOIN ATTENDANCE A ON S.ROLL_NUMBER=A.ROLL_NUMBER)
INNER JOIN FACULTY F ON A.FAC_ID= F.FAC_ID)
WHERE PERCENTAGE<80;
```

	ROLL_NUMBER	S_NAME	PERCENTAGE	FAC_NAME	SUBJECT_NAME
1	197110	NAVJOT SINGH	63	MAHENDRA PAL	DIGITAL ELECTRONICS
2	197123	TANMAY BHATIYA	59	SHAKSHI SEN	DATA MANAGEMENT
3	196125	BINOD PRADHAN	58	SEBASTIAN BATTENY	DATA STRUCTURES
4	196137	RAM GOPAL VERMA	61	SHAKSHI SEN	DATA MANAGEMENT
5	197264	RUHI JOHAR	78	KAPIL RANA	INTEGRATED CIRCUITS

5. Display the course that was chosen by maximum number of students

```
SELECT SUBJECT_NAME,COUNT(*) AS NUMBER_OF_TIMES FROM COURSE GROUP BY
SUBJECT_NAME HAVING COUNT(SUBJECT_NAME)=(SELECT MAX(COUNT(SUBJECT_NAME)) FROM
COURSE GROUP BY SUBJECT_NAME);
```

	SUBJECT_NAME	NUMBER_OF_TIMES
1	INTEGRATED CIRCUITS	6