

C# Full stack Development-Assignment 4

(Submitted by AMRUTHA S KUMAR)

Create table with the following fields

1. tblcourse-CourseId (P.K, A.I), Coursename, Courseshortname, Coursetype

Table course

```
CREATE DATABASE STUDENTS;
```

```
USE STUDENTS;
```

```
CREATE TABLE course(CourseId INT PRIMARY KEY NOT NULL IDENTITY(1,1), Coursename VARCHAR(50) NOT NULL, Courseshortname VARCHAR(50) NOT NULL, Coursetype VARCHAR(50) NOT NULL);
```

```
INSERT INTO course(Coursename, Courseshortname, Coursetype) VALUES (('COMPUTER SCIENCE'), ('CS'), ('DIPLOMA')), (('MASTER IN COMPUTER APPLICATION'), ('MCA'), ('POST GRADUATE')), (('BACHELOR IN COMPUTER APPLICATION'), ('BCA'), ('DEGREE')), (('COMMERCE'), ('C1'), ('DIPLOMA')), (('BACHELOR IN COMPUTER SCIENCE'), ('POST GRADUATE'), ('DEGREE')), (('BAA'), ('BAA'), ('DIPLOMA'));
```

```
select * from course;
```

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Results Messages

	CourseId	Coursename	Courseshortname	Coursetype
1	1	COMPUTER SCIENCE	CS	DIPLOMA
2	2	MASTER IN COMPUTER APPLICATION	MCA	POST GRADUATE
3	3	BACHELOR IN COMPUTER APPLICATION	BCA	DEGREE
4	4	COMMERCE	C1	DIPLOMA
5	5	BACHELOR IN COMPUTER SCIENCE	POST GRADUATE	DEGREE
6	6	BAA	BAA	DIPLOMA

2. tblbatch-BatchId (P.K, A.I),BatchName

Table Batch

```
CREATE TABLE batch(BatchId INT PRIMARY KEY NOT NULL IDENTITY(1,1),Batchname VARCHAR(50));
```

```
INSERT INTO batch(Batchname)VALUES('B2019'),('B2022'),('B2020'),('B2017'),('B2022'),  
('B2021'),('B2015');
```

```
INSERT INTO batch(Batchname)VALUES('B2017-B2020'),('B2022-B2023'),('B2021-B2022'),('B2015-  
B2017');
```

```
SELECT * FROM batch;
```

	CourseId	CourseName	CourseShortName	CourseType
1	1	COMPUTER SCIENCE	CS	DIPLOMA
2	2	MASTER IN COMPUTER APPLICATION	MCA	POST GRADUATE
3	3	BACHELOR IN COMPUTER APPLICATION	BCA	DEGREE
4	4	COMMERCE	C1	DIPLOMA
5	5	BACHELOR IN COMPUTER SCIENCE	POST GRADUATE	DEGREE
6	6	BAA	BAA	DIPLOMA

3. tblstudent –

Studentid (P.K,A.I),Student_Name,Student_Gender,Student_DOB,Student_Email,Course_Id,
Batch_id,Student_mark

Table Student

```
CREATE TABLE student(Studentid INT PRIMARY KEY IDENTITY(1,1) NOT NULL,Student_Name
VARCHAR(50) NOT NULL,Student_Gender VARCHAR(10) NOT NULL CHECK (Student_Gender in
('Female','Male','Others')),Student_DOB DATE NOT NULL, Student_Email VARCHAR(50) NOT
NULL,CourseId INT FOREIGN KEY REFERENCES course(CourseId),BatchId INT FOREIGN KEY REFERENCES
batch(BatchId), Student_Mark VARCHAR(50) NOT NULL);
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('AMRITHA','Female','2000-02-22','amruthaskumar@outlook.com',2,4,'98'),
('ANU','Female','2000-06-21','anu123@gmail.com',3,5,'79'),('ABHI','Male','1999-09-
11','abhi2k@gmail.com',1,3,'96'),('SREE','Female','1999-02-
02','sree456@gmail.com',1,5,'89'),('ANANDHU','Male','2000-12-
22','anandhu12@gmail.com',2,5,'68');
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('AMRUTHA','Female','2000-02-22','amruthaskumar@outlook.com',2,4,'98');
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('ANU','Female','2000-06-21','anu123@gmail.com',3,5,'79');
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('ABHI','Male','1999-09-01','abhi2k@gmail.com',1,3,'96');
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('ANU','Female','2000-06-21','anu123@gmail.com',3,5,'79');
```

INSERT INTO

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark
)VALUES('GOUTHAM','Male','1999-02-22','goutham@outlook.com',6,4,'98'),
('ANJANA','Female','1999-06-21','anu123@gmail.com',6,5,'79');
```

```
SELECT * FROM students;
```

: null)

```
SELECT * FROM students;
```

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Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	Batchid	Student_Mark
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
2	2	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
3	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	1	3	96
4	4	SREE	Female	1999-02-02	sree456@gmail.com	1	5	89
5	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	2	5	68
6	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
7	7	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	1	3	96
9	9	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
10	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	6	4	98
11	11	ANJANA	Female	1999-06-21	anu123@gmail.com	6	5	79

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1. Select all the details courses

```
SELECT * FROM course;
```

select * from course;

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Results Messages

	Courseld	Coursename	Courseshortname	Coursetype
1	1	COMPUTER SCIENCE	CS	DIPLOMA
2	2	MASTER IN COMPUTER APPLICATION	MCA	POST GRADUATE
3	3	BACHELOR IN COMPUTER APPLICATION	BCA	DEGREE
4	4	COMMERCE	C1	DIPLOMA
5	5	BACHELOR IN COMPUTER SCIENCE	POST GRADUATE	DEGREE
6	6	BAA	BAA	DIPLOMA

2. Select the name of UG Courses

```
SELECT Coursename FROM course WHERE Coursetype='DEGREE';
```

```
SELECT Coursename FROM course WHERE Coursetype='DEGREE';
```

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Results Messages

	Coursename
1	BACHELOR IN COMPUTER APPLICATION
2	BACHELOR IN COMPUTER SCIENCE

3. Select the name and short name of PG Courses

```
SELECT Coursename,Courseshortname FROM course WHERE Coursetype='POST GRADUATE';
```

```
SELECT Coursename,Courseshortname FROM course WHERE Coursetype='POST GRADUATE';
```

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Results Messages

	Coursename	Courseshortname
1	MASTER IN COMPUTER APPLICATION	MCA

4. Select the details of batches

```
SELECT * FROM batch;
```

```
select * from batch;
```

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Results Messages

	Courseld	Coursename	Courseshortname	Coursetype
1	1	COMPUTER SCIENCE	CS	DIPLOMA
2	2	MASTER IN COMPUTER APPLICATION	MCA	POST GRADUATE
3	3	BACHELOR IN COMPUTER APPLICATION	BCA	DEGREE
4	4	COMMERCE	C1	DIPLOMA
5	5	BACHELOR IN COMPUTER SCIENCE	POST GRADUATE	DEGREE
6	6	BAA	BAA	DIPLOMA

5. Select the details of students

```
SELECT * FROM student;
```

```
: null) SELECT * FROM students;
```

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Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
2	2	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
3	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	1	3	96
4	4	SREE	Female	1999-02-02	sree456@gmail.com	1	5	89
5	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	2	5	68
6	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
7	7	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	1	3	96
9	9	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
10	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	6	4	98
11	11	ANJANA	Female	1999-06-21	anu123@gmail.com	6	5	79

6. Insert 3 students details whose course is MCA or BCA

```
INSERT INTO
```

```
students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark)
VALUES('ANANYA','Female','1998-09-01','ananya2k@gmail.com',2,3,'66'),('RAM','Male','1998-09-21',
'ram45@gmail.com',3,3,'87'),('ATHI','Female','1998-10-01','athirababu@gmail.com',2,3,'76');
```

```
SELECT * FROM students;
```

1
INSERT INTO students(Student_Name,Student_Gender,Student_DOB,Student_Email,CourseId,BatchId,Student_Mark)VALUES('ANANYA','Female');

82 %

Results Messages

	StudentId	Student_Name	Student_Gender	Student_DOB	Student_Email	CourseId	BatchId	Student_Mark
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
2	2	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
3	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	1	3	96
4	4	SREE	Female	1999-02-02	sree456@gmail.com	1	5	89
5	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	2	5	68
6	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
7	7	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	1	3	96
9	9	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
10	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	6	4	98
11	11	ANJANA	Female	1999-06-21	anu123@gmail.com	6	5	79
12	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	2	3	66
13	13	RAM	Male	1998-09-21	ram45@gmail.com	3	3	87
14	14	ATHI	Female	1998-10-01	athirababu@gmail.com	2	3	76

7. Select the count of male and Female Students (use if case Statement)

```
SELECT SUM(CASE WHEN Student_Gender = 'Male' THEN 1 ELSE 0 END) as Total_Male,  
       SUM(CASE WHEN Student_Gender = 'Female' THEN 1 ELSE 0 END) as Total_Female  
FROM students;
```

```

SELECT SUM(CASE WHEN Student_Gender = 'Male' THEN 1 ELSE 0 END) as Total_Male,
       SUM(CASE WHEN Student_Gender = 'Female' THEN 1 ELSE 0 END) as Total_Female
FROM students;

select * from student;
select * from batch;

SELECT * FROM student WHERE Student_Gender='Female';
select * from course;

```

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Results Messages

	Total_Male	Total_Female
1	5	9

8. Select the details of Female Students

```
SELECT * FROM students WHERE Student_Gender='Female';
```

```

SELECT * FROM students WHERE Student_Gender='Female';
select * from course;

```

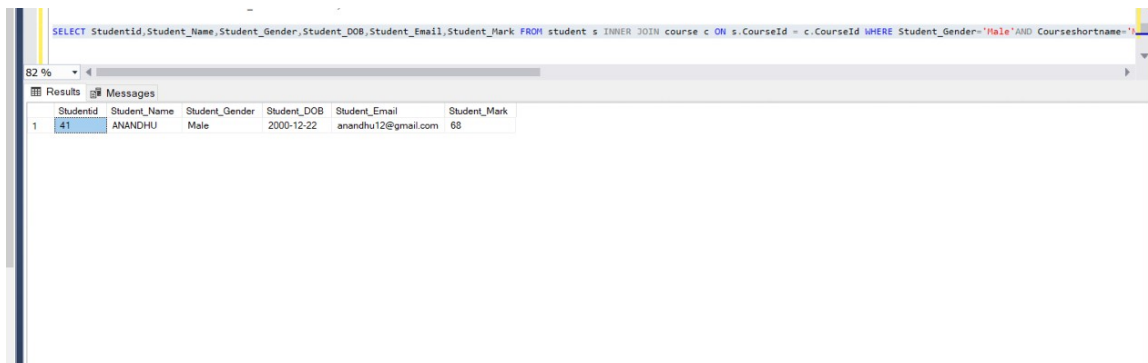
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Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	Batchld	Student_Mark
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
2	2	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
3	4	SREE	Female	1999-02-02	sree456@gmail.com	1	5	89
4	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	2	4	98
5	7	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
6	9	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
7	11	ANJANA	Female	1999-06-21	anu123@gmail.com	6	5	79
8	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	2	3	66
9	14	ATHI	Female	1998-10-01	athirababu@gmail.com	2	3	76

9. Select the details Males students whose course is MCA


```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM
students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Student_Gender='Male'AND
Courseshortname='MCA';
```

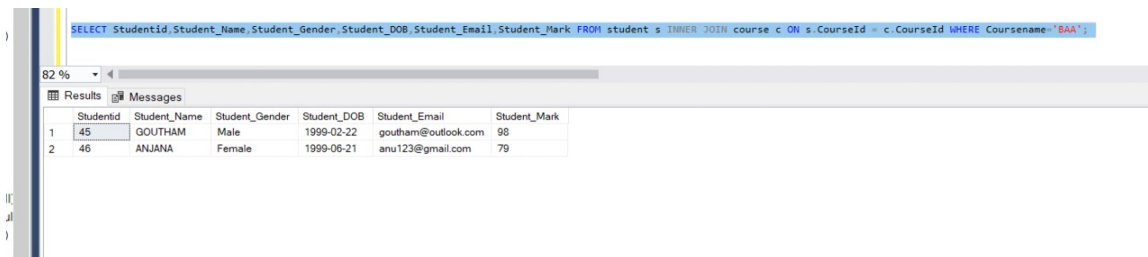


The screenshot shows a SQL query window with the following query: `SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Student_Gender='Male'AND Courseshortname='MCA';`. The results pane displays a single row of data for student ANANDHU.

Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
41	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68

10. Select the details BAA Students

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM
students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE CourseName='BAA';
```



The screenshot shows a SQL query window with the following query: `SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE CourseName='BAA';`. The results pane displays two rows of data for students GOUTHAM and ANJANA.

Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
45	GOUTHAM	Male	1999-02-22	goutham@outlook.com	98
46	ANJANA	Female	1999-06-21	anu123@gmail.com	79

11. Select the details of BAA students whose batch is 2017-2020

```
select * from students where CourseId=(select CourseId from
course where Courseshortname='BAA') and BatchId=(select BatchId
from batch where Batchname='B2017-B2020');
```

```
select * from students where CourseId=(select CourseId from
course where Courseshortname='BAA') and BatchId=(select BatchId
from batch where Batchname='B2017-B2020');
```

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Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	15	GIREESH	Male	1999-02-22	goutham@outlook.com	6	8	98
2	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	6	8	79

12. Select all the course short name and total number of students

```
SELECT MAX(Courseshortname) AS Course_name, COUNT(Studentid) AS Count_students
FROM course
LEFT JOIN students ON students.CourseId = course.CourseId
GROUP BY course.CourseId;
```

```
SELECT MAX(Courseshortname) AS Course_name, COUNT(Studentid) AS Count_students
FROM course
LEFT JOIN students ON students.CourseId = course.CourseId
GROUP BY course.CourseId;
```

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Results Messages

	Course_name	Count_students
1	CS	3
2	MCA	5
3	BCA	4
4	C1	0
5	POST GRADUATE	0
6	BAA	4

13. Select the details UG Students

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM
students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Coursetype='DEGREE';
```

SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students s INNER JOIN cour						
82 %						
Results	Messages					
	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
1	2	ANU	Female	2000-06-21	anu123@gmail.com	79
2	7	ANU	Female	2000-06-21	anu123@gmail.com	79
3	9	ANU	Female	2000-06-21	anu123@gmail.com	79
4	13	RAM	Male	1998-09-21	ram45@gmail.com	87

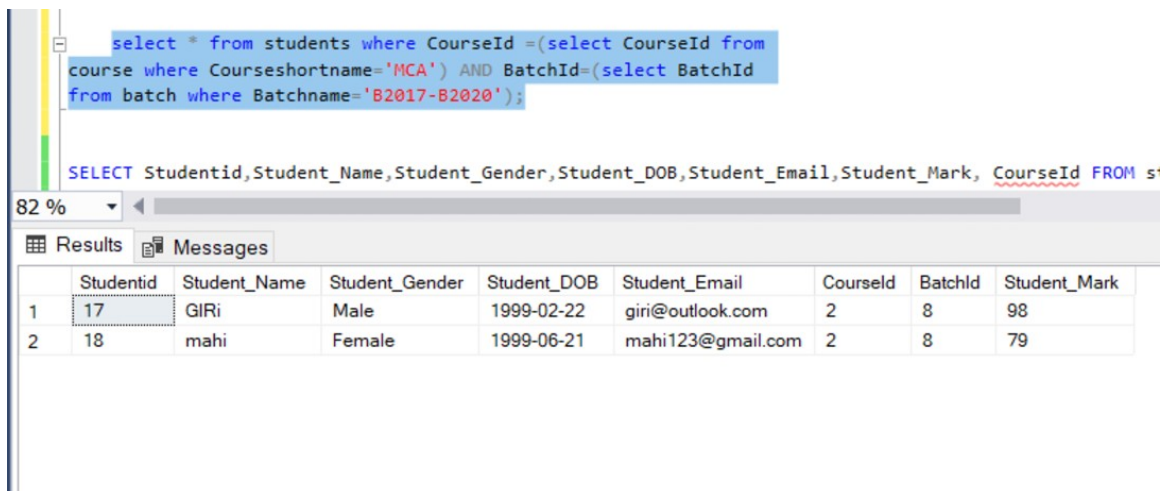
14. Select the details of PG Students

SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Coursetype='POST GRADUATE';

SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students s INNER JOIN						
82 %						
Results	Messages					
	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	98
2	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68
3	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	98
4	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	66
5	14	ATHI	Female	1998-10-01	athirababu@gmail.com	76

15. Select the details of MCA Students whose batch is 2019-2021

```
select * from students where CourseId =(select CourseId from  
course where Courseshortname='MCA') AND BatchId=(select BatchId  
from batch where Batchname='B2017-B2020');
```



The screenshot shows a SQL query window with the following query:

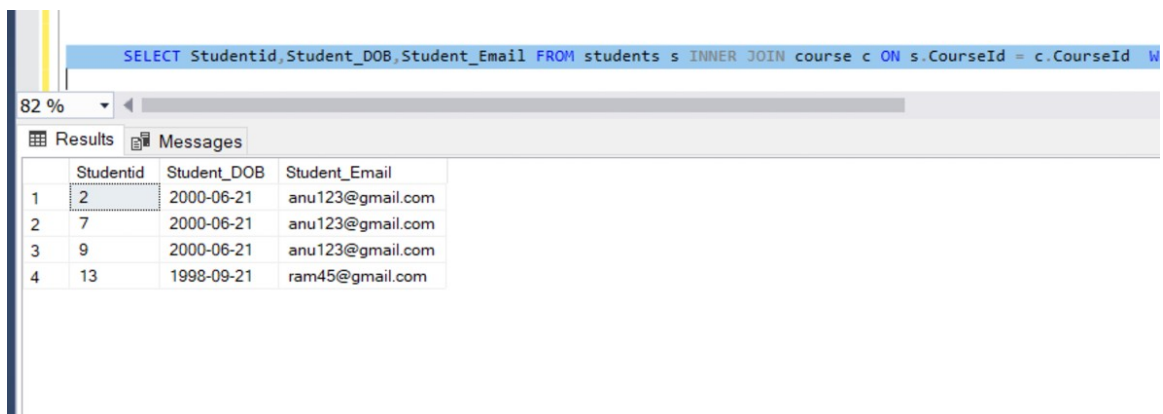
```
select * from students where CourseId =(select CourseId from  
course where Courseshortname='MCA') AND BatchId=(select BatchId  
from batch where Batchname='B2017-B2020');
```

Below the query window, the results are displayed in a table with the following columns: Studentid, Student_Name, Student_Gender, Student_DOB, Student_Email, CourseId, BatchId, and Student_Mark. The results show two rows of data.

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	CourseId	BatchId	Student_Mark
1	17	GIRi	Male	1999-02-22	giri@outlook.com	2	8	98
2	18	mahi	Female	1999-06-21	mahi123@gmail.com	2	8	79

16. Select the email and DOB of BCA Students

```
SELECT Studentid,Student_DOB,Student_Email FROM students s INNER JOIN course c  
ON s.CourseId = c.CourseId WHERE Courseshortname='BCA' ;
```



The screenshot shows a SQL query window with the following query:

```
SELECT Studentid,Student_DOB,Student_Email FROM students s INNER JOIN course c ON s.CourseId = c.CourseId W
```

Below the query window, the results are displayed in a table with the following columns: Studentid, Student_DOB, and Student_Email. The results show four rows of data.

	Studentid	Student_DOB	Student_Email
1	2	2000-06-21	anu123@gmail.com
2	7	2000-06-21	anu123@gmail.com
3	9	2000-06-21	anu123@gmail.com
4	13	1998-09-21	ram45@gmail.com

17. Select the students details with their course name and batch name

```
SELECT
```

```
Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,Coursename,Batchname FROM students s
```

```
INNER JOIN course c ON s.CourseId = c.CourseId
```

```
INNER JOIN batch b ON s.BatchId = b.BatchId;
```

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SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,Coursename,Batchname FROM students s
 INNER JOIN course c ON s.CourseId = c.CourseId
 INNER JOIN batch b ON s.BatchId = b.BatchId;

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark	Coursename	Batchname
1	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	98	MASTER IN COMPUTER APPLICATION	B2017
2	2	ANU	Female	2000-06-21	anu123@gmail.com	79	BACHELOR IN COMPUTER APPLICATION	B2022
3	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	96	COMPUTER SCIENCE	B2020
4	4	SREE	Female	1999-02-02	sree456@gmail.com	89	COMPUTER SCIENCE	B2022
5	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68	MASTER IN COMPUTER APPLICATION	B2022
6	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	98	MASTER IN COMPUTER APPLICATION	B2017
7	7	ANU	Female	2000-06-21	anu123@gmail.com	79	BACHELOR IN COMPUTER APPLICATION	B2022
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	96	COMPUTER SCIENCE	B2020
9	9	ANU	Female	2000-06-21	anu123@gmail.com	79	BACHELOR IN COMPUTER APPLICATION	B2022
10	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	98	BAA	B2017
11	11	ANJANA	Female	1999-06-21	anu123@gmail.com	79	BAA	B2022
12	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	66	MASTER IN COMPUTER APPLICATION	B2020
13	13	RAM	Male	1998-09-21	ram45@gmail.com	87	BACHELOR IN COMPUTER APPLICATION	B2020
14	14	ATHI	Female	1998-10-01	athirababu@gmail.com	76	MASTER IN COMPUTER APPLICATION	B2020
15	15	GIREESH	Male	1999-02-22	goutham@outlook.com	98	BAA	B2017-B2020
16	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	79	BAA	B2017-B2020
17	17	GIRI	Male	1999-02-22	giri@outlook.com	98	MASTER IN COMPUTER APPLICATION	B2017-B2020
18	18	mahi	Female	1999-06-21	mahi123@gmail.com	79	MASTER IN COMPUTER APPLICATION	B2017-B2020

18. Select Batch name and number of students

```
SELECT MAX(Batchname) AS Batch_name, COUNT(Studentid) AS Count_students
```

```
FROM batch
```

```
LEFT JOIN students ON students.BatchId = batch.BatchId
```

```
GROUP BY batch.BatchId;
```

```

SELECT MAX(Batchname) AS Batch_name, COUNT(Studentid) AS Count_students
FROM batch
LEFT JOIN students ON students.BatchId = batch.BatchId
GROUP BY batch.BatchId;

```

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Results Messages

	Batch_name	Count_students
1	B2019	0
2	B2022	0
3	B2020	5
4	B2017	3
5	B2022	6
6	B2021	0
7	B2015	0
8	B2017-B2020	4
9	B2022-B2023	0
10	B2021-B2022	0
11	B2015-B2017	0

19. Select the students name, course name and students email

```

SELECT Studentid, Student_Name, Student_Email , Coursename FROM students s INNER
JOIN course c ON s.CourseId = c.CourseId ;

```

```
SELECT Studentid,Student_Name,Student_Email ,Coursename FROM students s INNER JOIN course c ON s.CourseId = c.CourseId
```

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Results Messages

	Studentid	Student_Name	Student_Email	Coursename
1	1	AMRUTHA	amruthakumar@outlook.com	MASTER IN COMPUTER APPLICATION
2	2	ANU	anu123@gmail.com	BACHELOR IN COMPUTER APPLICATION
3	3	ABHI	abhi2k@gmail.com	COMPUTER SCIENCE
4	4	SREE	sree456@gmail.com	COMPUTER SCIENCE
5	5	ANANDHU	anandhu12@gmail.com	MASTER IN COMPUTER APPLICATION
6	6	AMRUTHA	amruthakumar@outlook.com	MASTER IN COMPUTER APPLICATION
7	7	ANU	anu123@gmail.com	BACHELOR IN COMPUTER APPLICATION
8	8	ABHI	abhi2k@gmail.com	COMPUTER SCIENCE
9	9	ANU	anu123@gmail.com	BACHELOR IN COMPUTER APPLICATION
10	10	GOUTHAM	goutham@outlook.com	BAA
11	11	ANJANA	anu123@gmail.com	BAA
12	12	ANANYA	ananya2k@gmail.com	MASTER IN COMPUTER APPLICATION
13	13	RAM	ram45@gmail.com	BACHELOR IN COMPUTER APPLICATION
14	14	ATHI	athirababu@gmail.com	MASTER IN COMPUTER APPLICATION
15	15	GIREESH	goutham@outlook.com	BAA
16	16	ANUSREE	anu123@gmail.com	BAA
17	17	GIRI	giri@outlook.com	MASTER IN COMPUTER APPLICATION
18	18	mahi	mahi123@gmail.com	MASTER IN COMPUTER APPLICATION

20. Select the Students details and their Batch name also

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,
Batchname FROM students s INNER JOIN batch b ON s.BatchId = b.BatchId ;
```

```
SELECT Studentid,Student_Name,Student_Email ,Coursename FROM students s INNER JOIN course c ON s.CourseId = c.Course
```

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,
Batchname FROM students s INNER JOIN batch b ON s.BatchId = b.BatchId ;
```

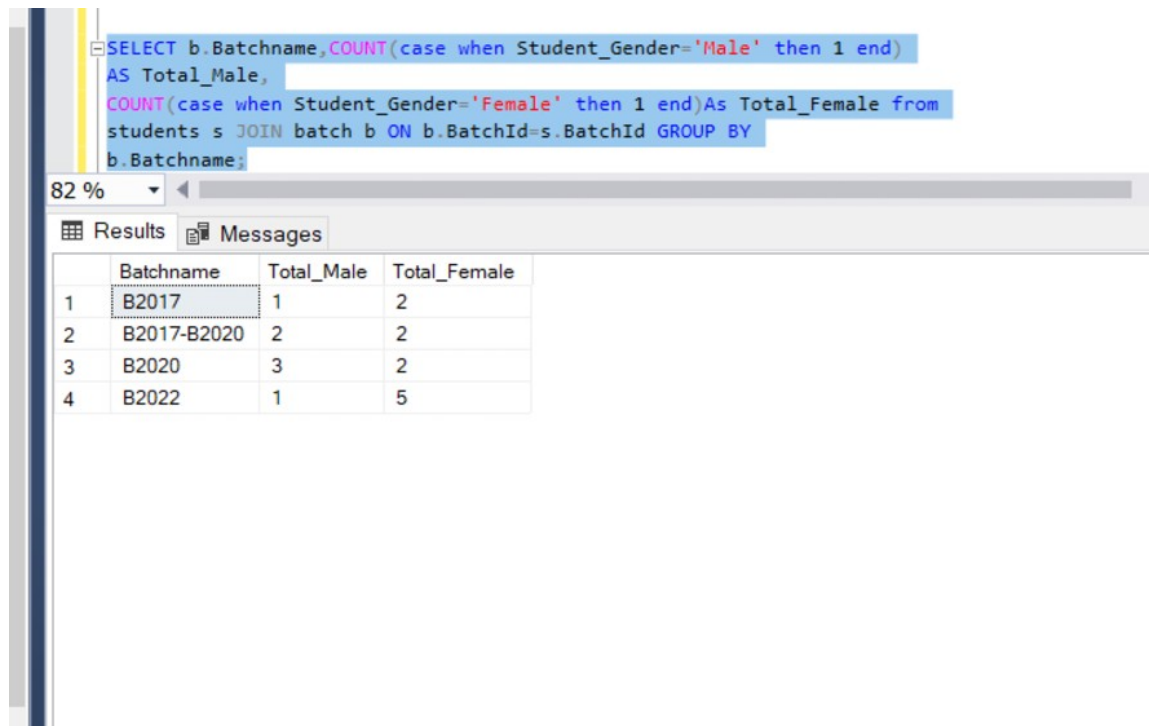
82 %

Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark	Batchname
1	1	AMRITHA	Female	2000-02-22	amruthakumar@outlook.com	98	B2017
2	2	ANU	Female	2000-06-21	anu123@gmail.com	79	B2022
3	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	96	B2020
4	4	SREE	Female	1999-02-02	sree456@gmail.com	89	B2022
5	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68	B2022
6	6	AMRUTHA	Female	2000-02-22	amruthakumar@outlook.com	98	B2017
7	7	ANU	Female	2000-06-21	anu123@gmail.com	79	B2022
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	96	B2020
9	9	ANU	Female	2000-06-21	anu123@gmail.com	79	B2022
10	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	98	B2017
11	11	ANJANA	Female	1999-06-21	anu123@gmail.com	79	B2022
12	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	66	B2020
13	13	RAM	Male	1998-09-21	ram45@gmail.com	87	B2020
14	14	ATHI	Female	1998-10-01	athirababu@gmail.com	76	B2020
15	15	GIREESH	Male	1999-02-22	goutham@outlook.com	98	B2017-B2020
16	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	79	B2017-B2020
17	17	GIRI	Male	1999-02-22	giri@outlook.com	98	B2017-B2020
18	18	mahi	Female	1999-06-21	mahi123@gmail.com	79	B2017-B2020

21. Select the count of male and female students in batch wise Sample output

```
SELECT b.Batchname, COUNT(case when Student_Gender='Male' then 1 end)
AS Total_Male,
COUNT(case when Student_Gender='Female' then 1 end)As Total_Female from
students s JOIN batch b ON b.BatchId=s.BatchId GROUP BY
b.Batchname;
```



The screenshot shows a SQL query window with the following text:

```
SELECT b.Batchname, COUNT(case when Student_Gender='Male' then 1 end)
AS Total_Male,
COUNT(case when Student_Gender='Female' then 1 end)As Total_Female from
students s JOIN batch b ON b.BatchId=s.BatchId GROUP BY
b.Batchname;
```

Below the query window, the 'Results' tab is active, displaying a table with 4 rows and 4 columns. The columns are 'Batchname', 'Total_Male', and 'Total_Female'. The first column contains row numbers 1 through 4. The data is as follows:

	Batchname	Total_Male	Total_Female
1	B2017	1	2
2	B2017-B2020	2	2
3	B2020	3	2
4	B2022	1	5

22. Select the name of the BCA Student who have Maximum Mark

```
SELECT Student_Name FROM students WHERE Student_Mark=(select
MAX(Student_Mark)from students where CourseId=(select CourseId
from course where Courseshortname='BCA'));
```


<pre> SELECT Student_Name FROM students WHERE Student_Mark=(select MAX(Student_Mark)from students where CourseId=(select CourseId from course where Courseshortname='BCA')); </pre>	
82 %	
Results	Messages
Student_Name	
1	RAM

23. Select the Male MCA Student who have Minimum Mark

```

SELECT Student_Name FROM students WHERE Student_Mark=(select
MIN(Student_Mark)from students where CourseId=(select CourseId
from course where Courseshortname='MCA') and Student_Gender='Male');

```

<pre> SELECT Student_Name FROM students WHERE Student_Mark=(select MIN(Student_Mark)from students where CourseId=(select CourseId from course where Courseshortname='MCA') and Student_Gender='Male'); </pre>	
82 %	
Results	Messages
Student_Name	
1	ANANDHU

24. Select the students details of UG Students who have greater than the average mark

```

SELECT * FROM students WHERE Student_Mark >(select
AVG(Student_Mark)from students where CourseId IN (select
CourseId from course where Coursetype='DEGREE'))AND CourseId IN
(select CourseId from course where Coursetype='DEGREE');

```

```
SELECT * FROM students WHERE Student_Mark > (select
AVG(Student_Mark) from students where CourseId IN (select
CourseId from course where Coursetype='DEGREE')) AND CourseId IN
(select CourseId from course where Coursetype='DEGREE');
```

82 %

Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	13	RAM	Male	1998-09-21	ram45@gmail.com	3	3	87

25. Select the BCA student details who have Max Mark

```
SELECT * FROM students WHERE Student_Mark=(select
MAX(Student_Mark) from students where CourseId=(select CourseId
from course where Courseshortname='BCA'));
```

```
SELECT * FROM students WHERE Student_Mark=(select
MAX(Student_Mark) from students where CourseId=(select CourseId
from course where Courseshortname='BCA'));
```

82 %

Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	13	RAM	Male	1998-09-21	ram45@gmail.com	3	3	87

26. Select Name and Email of the students who have second highest mark

```
SELECT Student_Name,Student_Email from students where
Student_Mark= (select MAX(Student_Mark) FROM students WHERE
Student_Mark < (SELECT MAX(Student_Mark) FROM students));
```

```
SELECT Student_Name,Student_Email from students where
Student_Mark= (select MAX(Student_Mark) FROM students WHERE
Student_Mark < (SELECT MAX(Student_Mark) FROM students));
```

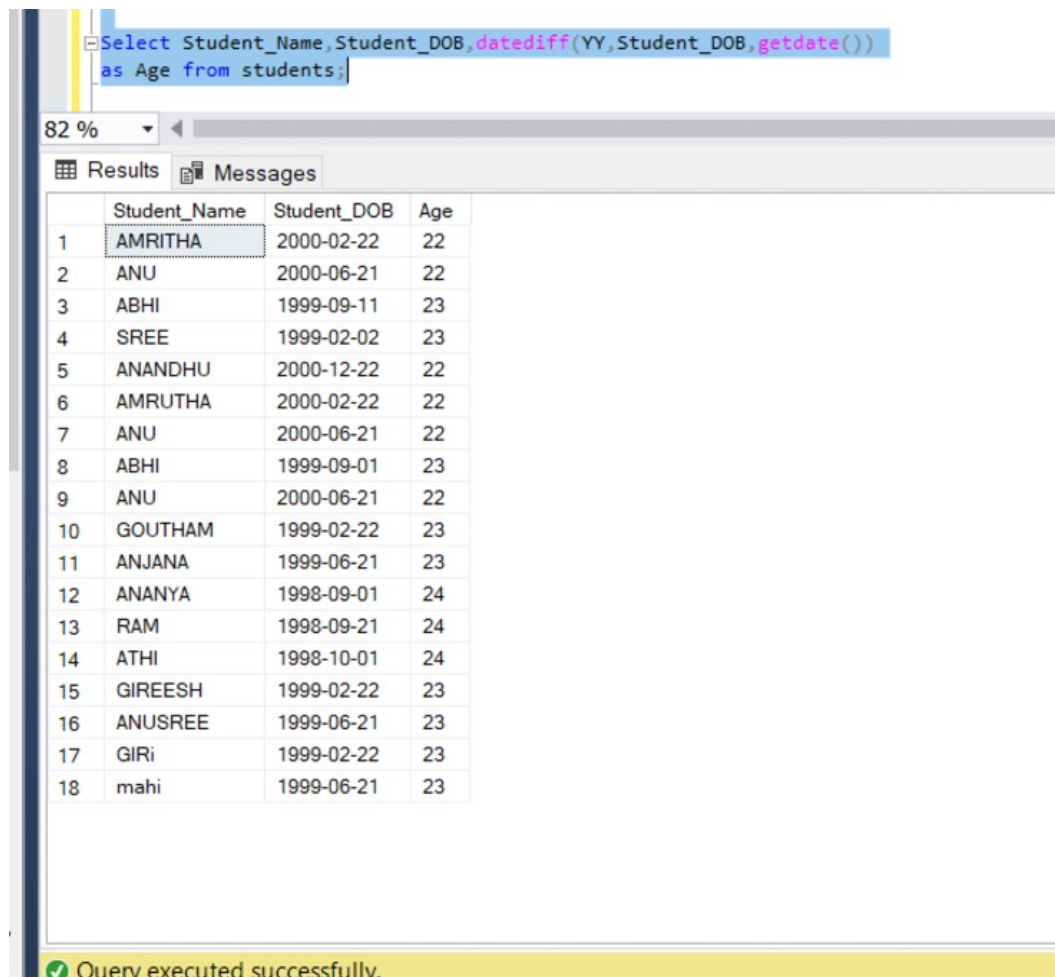
82 %

Results Messages

	Student_Name	Student_Email
1	ABHI	abhi2k@gmail.com

27. Select the Dob and Current Age of All students

```
Select Student_Name,Student_DOB,datediff(YY,Student_DOB,getdate())  
as Age from students;
```



The screenshot shows a SQL Server Enterprise Manager interface. At the top, a query window displays the following SQL statement:

```
Select Student_Name,Student_DOB,datediff(YY,Student_DOB,getdate())  
as Age from students;
```

Below the query window, the 'Results' tab is active, showing a table with 18 rows and 4 columns: Student_Name, Student_DOB, and Age. The first row is highlighted. At the bottom of the interface, a yellow status bar indicates 'Query executed successfully.'

	Student_Name	Student_DOB	Age
1	AMRITHA	2000-02-22	22
2	ANU	2000-06-21	22
3	ABHI	1999-09-11	23
4	SREE	1999-02-02	23
5	ANANDHU	2000-12-22	22
6	AMRUTHA	2000-02-22	22
7	ANU	2000-06-21	22
8	ABHI	1999-09-01	23
9	ANU	2000-06-21	22
10	GOUTHAM	1999-02-22	23
11	ANJANA	1999-06-21	23
12	ANANYA	1998-09-01	24
13	RAM	1998-09-21	24
14	ATHI	1998-10-01	24
15	GIREESH	1999-02-22	23
16	ANUSREE	1999-06-21	23
17	GIRI	1999-02-22	23
18	mahi	1999-06-21	23

28. Select the Student name , Month name of birth and year of birth for all the students

```
Select Student_Name,DATENAME(MONTH,DATEADD(MONTH,MONTH(Student_DOB),-1 )  
)AS Birth_Month,YEAR(Student_DOB) AS Year_Of_Birth FROM students;
```

```
Select Student_Name,DATENAME(MONTH,DATEADD(MONTH,MONTH(Student_DOB),-1 ))
AS Birth_Month,YEAR(Student_DOB) AS Year_Of_Birth FROM students;
```

82 %

Results Messages

	Student_Name	Birth_Month	Year_Of_Birth
1	AMRITHA	February	2000
2	ANU	June	2000
3	ABHI	September	1999
4	SREE	February	1999
5	ANANDHU	December	2000
6	AMRUTHA	February	2000
7	ANU	June	2000
8	ABHI	September	1999
9	ANU	June	2000
10	GOUTHAM	February	1999
11	ANJANA	June	1999
12	ANANYA	September	1998
13	RAM	September	1998
14	ATHI	October	1998
15	GIREESH	February	1999
16	ANUSREE	June	1999
17	GIRI	February	1999
18	mahi	June	1999

29. Select the Email and Student DOB of MCA Female Students

```
SELECT Studentid,Student_Name,Student_DOB,Student_Email,Courseshortname FROM students s
INNER JOIN course c ON s.CourseId = c.CourseId WHERE Courseshortname='MCA'AND
Student_Gender='Female';
```

```
SELECT Studentid,Student_Name,Student_DOB,Student_Email,Courseshortname FROM students s INNER
```

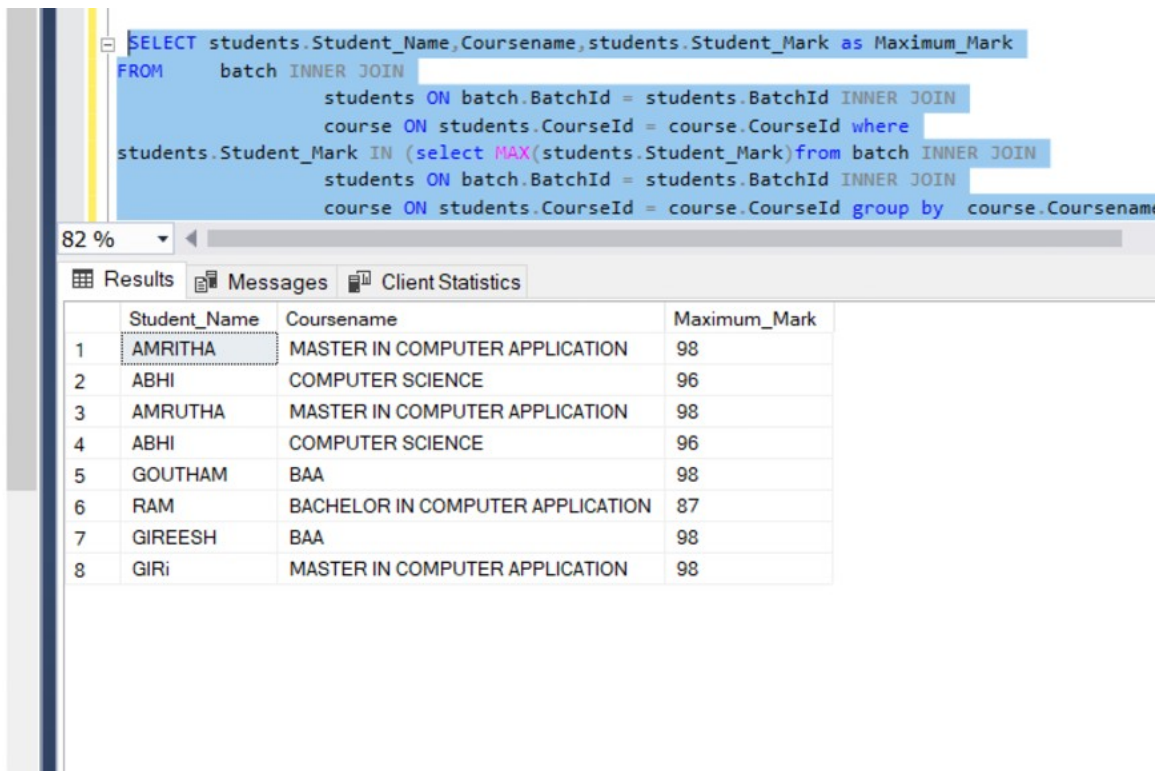
82 %

Results Messages

	Studentid	Student_Name	Student_DOB	Student_Email	Courseshortname
1	1	AMRITHA	2000-02-22	amruthaskumar@outlook.com	MCA
2	6	AMRUTHA	2000-02-22	amruthaskumar@outlook.com	MCA
3	12	ANANYA	1998-09-01	ananya2k@gmail.com	MCA
4	14	ATHI	1998-10-01	athirababu@gmail.com	MCA
5	18	mahi	1999-06-21	mahi123@gmail.com	MCA

30. Select the name of all the students who have maximum mark in course wise

```
SELECT students.Student_Name,Coursename,students.Student_Mark as Maximum_Mark
FROM      batch INNER JOIN
           students ON batch.BatchId = students.BatchId INNER JOIN
           course ON students.CourseId = course.CourseId where
students.Student_Mark IN (select MAX(students.Student_Mark)from batch INNER JOIN
                           students ON batch.BatchId = students.BatchId INNER JOIN
                           course ON students.CourseId = course.CourseId group by course.Coursename
) ;
```



The screenshot shows a SQL query in the query editor and its results in the Results pane. The query is a correlated subquery that finds the maximum mark for each course and then selects the students who achieved that mark. The results pane shows 8 rows of data.

	Student_Name	Coursename	Maximum_Mark
1	AMRITHA	MASTER IN COMPUTER APPLICATION	98
2	ABHI	COMPUTER SCIENCE	96
3	AMRUTHA	MASTER IN COMPUTER APPLICATION	98
4	ABHI	COMPUTER SCIENCE	96
5	GOUTHAM	BAA	98
6	RAM	BACHELOR IN COMPUTER APPLICATION	87
7	GIREESH	BAA	98
8	GIRI	MASTER IN COMPUTER APPLICATION	98

31. Select the Details students whose year of birth less than 1995

```
Select * from students where YEAR(Student_DOB)<1995;
```

Select * from students where YEAR(Student_DOB)<1995;

82 %

Results Messages

Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	Batchld	Student_Mark
-----------	--------------	----------------	-------------	---------------	----------	---------	--------------

32. Select the Course short name, Batch name , total number of students in batch and Course wise

```
SELECT batch.Batchname, course.Courseshortname,COUNT(students.Studentid) AS total
FROM      batch INNER JOIN
           students ON batch.BatchId = students.BatchId INNER JOIN
           course ON course.CourseId = students.CourseId
GROUP BY batch.Batchname, course.Courseshortname;
```

SELECT batch.Batchname, course.Courseshortname,COUNT(students.Studentid) AS total
FROM batch INNER JOIN
 students ON batch.BatchId = students.BatchId INNER JOIN
 course ON course.CourseId = students.CourseId
GROUP BY batch.Batchname, course.Courseshortname;

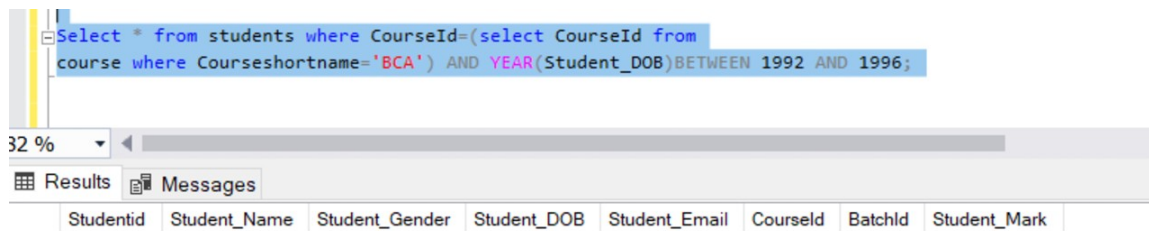
82 %

Results Messages Client Statistics

	Batchname	Courseshortname	total
1	B2017	BAA	1
2	B2017-B2020	BAA	2
3	B2022	BAA	1
4	B2020	BCA	1
5	B2022	BCA	3
6	B2020	CS	2
7	B2022	CS	1
8	B2017	MCA	2
9	B2017-B2020	MCA	2
10	B2020	MCA	2
11	B2022	MCA	1

33. Select details of BCA Students whose year of birth between 1992 and 1996

```
Select * from students where CourseId=(select CourseId from
course where Courseshortname='BCA') AND YEAR(Student_DOB)BETWEEN 1992 AND 1996;
```



32 %

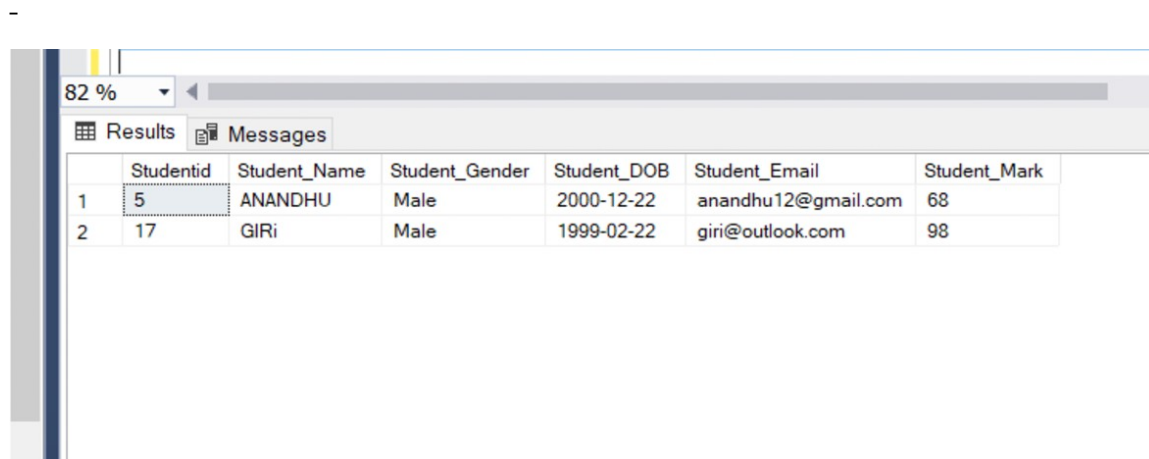
Results Messages

Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	CourseId	BatchId	Student_Mark
-----------	--------------	----------------	-------------	---------------	----------	---------	--------------

34. Select the details of Male PG Students

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM
students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Coursetype='POST
GRADUATE' AND Student_Gender='Male';
```

-



82 %

Results Messages

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
1	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68
2	17	GIRI	Male	1999-02-22	giri@outlook.com	98

35. Select the details of BCA Students who have greater than average mark 35. Select the details BAA –2019-2022 Batch Students

```
SELECT * FROM students WHERE Student_Mark >(select AVG(Student_Mark)from
students where CourseId IN (select CourseId from course where
Courseshortname='BCA')) AND CourseId IN (select CourseId from
course where Courseshortname='BCA');
```



```
SELECT * FROM students WHERE Student_Mark > (select AVG(Student_Mark) from
students where CourseId IN (select CourseId from course where
Courseshortname='BCA')) AND CourseId IN (select CourseId from
course where Courseshortname='BCA');
```

82 %

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	13	RAM	Male	1998-09-21	ram45@gmail.com	3	3	87

```
SELECT * FROM students WHERE CourseId=(select CourseId from
course where Courseshortname='BAA')AND BatchId=(SELECT BatchId
FROM batch WHERE Batchname='B2017-B2020');
```

```
SELECT * FROM students WHERE CourseId=(select CourseId from
course where Courseshortname='BAA')AND BatchId=(SELECT BatchId
FROM batch WHERE Batchname='B2017-B2020');
```

82 %

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	BatchId	Student_Mark
1	15	GIREESH	Male	1999-02-22	goutham@outlook.com	6	8	98
2	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	6	8	79

36. Select the name of student having maximum age?

```
SELECT Student_Name from students ORDER BY
datediff(YY,Student_DOB,getdate()) DESC OFFSET 0 ROWS FETCH FIRST 1
ROWS ONLY;
```



```
FROM batch WHERE Batchname='B2017-B2020');

SELECT Student_Name from students ORDER BY
datediff(YY,Student_DOB,getdate()) DESC OFFSET 0 ROWS FETCH FIRST 1
ROWS ONLY;
```

Student_Name
1 ANANYA

37. Select the name and email of the BCA Students whose have Minimum age

```
SELECT Student_Name,Student_Email from students WHERE
CourseId=(select CourseId from course where
Courseshortname='BCA')
ORDER BY datediff(YY,Student_DOB,getdate()) ASC OFFSET 0 ROWS FETCH
FIRST 1 ROWS ONLY;
```

```
SELECT Student_Name,Student_Email from students WHERE
CourseId=(select CourseId from course where
Courseshortname='BCA')
ORDER BY datediff(YY,Student_DOB,getdate()) ASC OFFSET 0 ROWS FETCH
FIRST 1 ROWS ONLY;
```

Student_Name	Student_Email
1 ANU	anu123@gmail.com

38. Select the details of the students in descending order of their DOB

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM
students ORDER BY Student_DOB DESC;
```

```
SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark FROM students ORDER BY
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark
1	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	68
2	2	ANU	Female	2000-06-21	anu123@gmail.com	79
3	7	ANU	Female	2000-06-21	anu123@gmail.com	79
4	9	ANU	Female	2000-06-21	anu123@gmail.com	79
5	6	AMRUTHA	Female	2000-02-22	amruthaskumar@outlook.com	98
6	1	AMRITHA	Female	2000-02-22	amruthaskumar@outlook.com	98
7	3	ABHI	Male	1999-09-11	abhi2k@gmail.com	96
8	8	ABHI	Male	1999-09-01	abhi2k@gmail.com	96
9	11	ANJANA	Female	1999-06-21	anu123@gmail.com	79
10	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	79
11	18	mahi	Female	1999-06-21	mahi123@gmail.com	79
12	17	GIRI	Male	1999-02-22	giri@outlook.com	98
13	15	GIREESH	Male	1999-02-22	goutham@outlook.com	98
14	10	GOUTHAM	Male	1999-02-22	goutham@outlook.com	98
15	4	SREE	Female	1999-02-02	sree456@gmail.com	89
16	14	ATHI	Female	1998-10-01	athirababu@gmail.com	76
17	13	RAM	Male	1998-09-21	ram45@gmail.com	87
18	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	66

39. Select the details of the students have mark between 65 and 91

```
SELECT * FROM students WHERE Student_Mark BETWEEN 65 and 91;
```

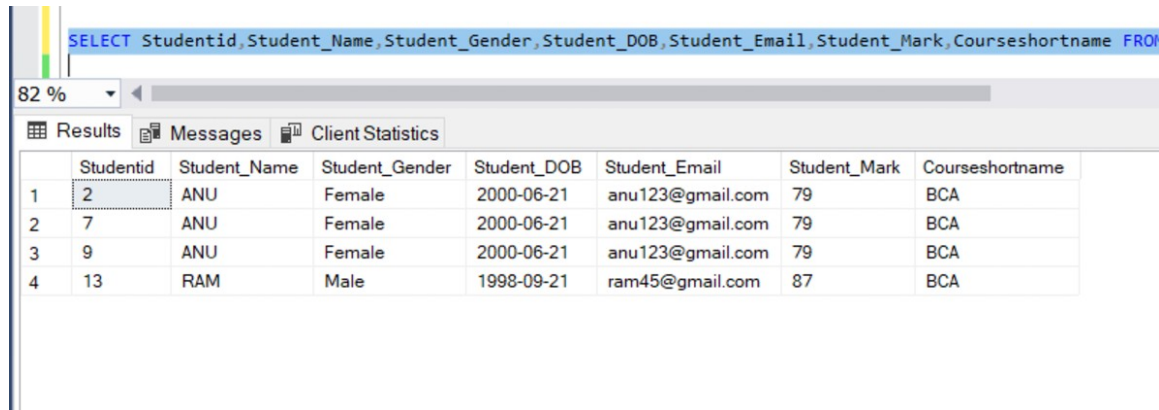
```
SELECT * FROM students WHERE Student_Mark BETWEEN 65 and 91;
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Courseld	Batchld	Student_Mark
1	2	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
2	4	SREE	Female	1999-02-02	sree456@gmail.com	1	5	89
3	5	ANANDHU	Male	2000-12-22	anandhu12@gmail.com	2	5	68
4	7	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
5	9	ANU	Female	2000-06-21	anu123@gmail.com	3	5	79
6	11	ANJANA	Female	1999-06-21	anu123@gmail.com	6	5	79
7	12	ANANYA	Female	1998-09-01	ananya2k@gmail.com	2	3	66
8	13	RAM	Male	1998-09-21	ram45@gmail.com	3	3	87
9	14	ATHI	Female	1998-10-01	athirababu@gmail.com	2	3	76
10	16	ANUSREE	Female	1999-06-21	anu123@gmail.com	6	8	79
11	18	mahi	Female	1999-06-21	mahi123@gmail.com	2	8	79

40. Select the details of BCA Students in their mark wise

SELECT

```
Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,Courseshortname  
FROM students s INNER JOIN course c ON s.CourseId = c.CourseId WHERE Courseshortname='BCA'  
ORDER BY Student_Mark;
```



The screenshot shows a SQL query execution window. At the top, the query is displayed: `SELECT Studentid,Student_Name,Student_Gender,Student_DOB,Student_Email,Student_Mark,Courseshortname FROM`. Below the query, there are tabs for 'Results', 'Messages', and 'Client Statistics'. The 'Results' tab is active, showing a table with 8 columns: Studentid, Student_Name, Student_Gender, Student_DOB, Student_Email, Student_Mark, and Courseshortname. The table contains 4 rows of data, all for students in the 'BCA' course. The first row is highlighted with a mouse cursor.

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Student_Mark	Courseshortname
1	2	ANU	Female	2000-06-21	anu123@gmail.com	79	BCA
2	7	ANU	Female	2000-06-21	anu123@gmail.com	79	BCA
3	9	ANU	Female	2000-06-21	anu123@gmail.com	79	BCA
4	13	RAM	Male	1998-09-21	ram45@gmail.com	87	BCA