Create table with the following fields

- 1. tblcourse-CourseId (P.K, A.I), Coursename, Courseshortname, Coursetype
- 2. tblbatch-BatchId (P.K, A.I),BatchName
- 3. tblstudent Studentid
- $(P.K,A.I), Student_Name, Student_Gender, Student_DOB, Student_Email, Course_Id, Batch_id, Student_mark$

1. Select all the details courses

	Courseld	Coursename	Courseshortname	Coursetype
1	1	Bachelor of computer application	BCA	UG
2	2	Bachelor of commerce	Bcom	UG
3	3	Bachelor of human resourse	BHRM	UG
4	4	Master of computer application	MCA	PG
5	5	Master of bussiness Administration	MBA	PG

2. Select the name of UG Courses

	Coursename
1	Bachelor of computer application
2	Bachelor of commerce
3	Bachelor of human resourse

3. Select the name and short name of PG Courses

	Coursename	Courseshortname
1	Master of computer application	MCA
2	Master of bussiness Administration	MBA

4. Select the details of batches

	BatchId	BatchName
1	1	2017-2018
2	2	2018-2019
3	3	2019-2020
4	4	2020-2021
5	5	2021-2022

5. Select the details of students

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
2	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77
3	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
4	4	Rahul	M	1997-06-21	rahul04@gmail.com	3	1	86
5	5	Akshay	M	1996-09-30	akshay56@gmail.com	2	2	84

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

```
insert into tblstudent values('Anoopa','F','2001-03-18','anoopa03@gmail.com','1','4','92');
insert into tblstudent values('George','M','1998-06-16','george@gmail.com','1','3','77');
insert into tblstudent values('Alan','M','1997-07-05','alan01gmail.com','4','5','96');
```

select * from tblstudent where Course_Id in(1,4);

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
2	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
3	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
4	7	George	M	1998-06-16	george@gmail.com	1	3	77
5	8	Alan	M	1997-07-05	alan01gmail.com	4	5	96

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

```
|SELECT COUNT(case when Student_Gender='M' then 1 end) AS
|Total_Male,|
| COUNT(case when Student_Gender='F' then 1 end)As Total_Female from
| tblstudent;
```

	Total_Male	Total_Female
1	5	3

8. Select the details of Female Students

select * from tblstudent where Student_Gender='F';

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77
2	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
3	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92

9. Select the details Males students whose course is MCA

```
select * from tblstudent where Course_id=(select CourseId from
tblcourse where Courseshortname='MCA') and Student_Gender='M';
```

	Studentid	_	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
2	8	Alan	M	1997-07-05	alan01gmail.com	4	5	96

10. Select the details BAA Students

select * from tblstudent where Course_Id=(select CourseId from
tblcourse where Courseshortname='BAA');

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	9	Albin	M	1998-05-24	albin03@gmail.com	7	1	84
2	10	Ambly	F	1999-03-03	ambly29@gmail.com	7	3	90

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

select * from tblstudent where Course_Id=(select CourseId from
tblcourse where Courseshortname='BAA') and Batch_id=(select BatchId
from tblbatch where BatchName='2017-2018');

	Studentid	_	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	9	Albin	M	1998-05-24	albin03@gmail.com	7	1	84

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

```
SELECT c.Courseshortname AS Course_name ,COUNT(*) AS Count_students
FROM tblcourse c JOIN tblstudent s
ON s.Course_Id = c.CourseId GROUP BY c.Courseshortname;
```

	Course_name	Count_students
1	BAA	2
2	BCA	3
3	Bcom	1
4	BHRM	1
5	MBA	1
6	MCA	2

13. Select the details UG Students

select * from tblstudent where Course_Id IN(select CourseId from tblcourse where Coursetype='UG');

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
2	4	Rahul	M	1997-06-21	rahul04@gmail.com	3	1	86
3	5	Akshay	M	1996-09-30	akshay56@gmail.com	2	2	84
4	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
5	7	George	M	1998-06-16	george@gmail.com	1	3	77
6	9	Albin	M	1998-05-24	albin03@gmail.com	7	1	84
7	10	Ambly	F	1999-03-03	ambly29@gmail.com	7	3	90

14. Select the details of PG Students

```
jselect * from tblstudent where Course_Id IN(select CourseId from
tblcourse where Coursetype='PG');
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
2	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77
3	8	Alan	M	1997-07-05	alan01gmail.com	4	5	96

15. Select the details of MCA Students whose batch is 2019-2020

```
|select * from tblstudent where Course_Id =(select CourseId from
tblcourse where Courseshortname='MCA') AND Batch_id=(select BatchId
from tblbatch where BatchName='2019-2020');
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	11	Elizbath	F	1998-09-05	elizabth07gmail.com	4	3	96

16. Select the email and DOB of BCA Students

```
|select Student_Email,Student_DOB from tblstudent where | Course_id=(select CourseId from tblcourse where | Courseshortname='BCA');
```

	Student_Email	Student_DOB
1	nanthana@gmail.com	2000-11-24
2	anoopa03@gmail.com	2001-03-18
3	george@gmail.com	1998-06-16

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

```
Jselect s.Student_Name AS Student_Name ,c.Coursename AS
Course_Name,b.BatchName from tblcourse c JOIN tblstudent s ON
s.Course_Id=c.CourseId JOIN tblbatch b ON b.BatchId=s.Batch_id;
```

	Student_Name	Course_Name	BatchName
1	Roshan	Master of computer application	2021-2022
2	Anakha	Master of bussiness Administration	2020-2021
3	Nanthana	Bachelor of computer application	2019-2020
4	Rahul	Bachelor of human resourse	2017-2018
5	Akshay	Bachelor of commerce	2018-2019
6	Anoopa	Bachelor of computer application	2020-2021
7	George	Bachelor of computer application	2019-2020

18. Select Batch name and number of students

ISELECT b.BatchName AS Batch_Name ,COUNT(*) AS Count_students FROM
tblbatch b JOIN tblstudent s ON s.Batch_id = b.BatchId GROUP BY
b.BatchName;

	Batch_Name	Count_students
1	2017-2018	2
2	2018-2019	1
3	2019-2020	4
4	2020-2021	2
5	2021-2022	2

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

Select s.Student_Name AS Student_Name ,c.Coursename AS
Course_Name,S.Student_Email from tblcourse c JOIN tblstudent s ON
s.Course_Id=c.CourseId ;

	Student_Name	Course_Name	Student_Email
1	Roshan	Master of computer application	roshan01@gmail.com
2	Anakha	Master of bussiness Administration	anakha99@gmail.com
3	Nanthana	Bachelor of computer application	nanthana@gmail.com
4	Rahul	Bachelor of human resourse	rahul04@gmail.com
5	Akshay	Bachelor of commerce	akshay56@gmail.com
6	Anoopa	Bachelor of computer application	anoopa03@gmail.com
7	George	Bachelor of computer application	george@gmail.com

20. Select the Students details and their Batch name also

select s.* ,b.BatchName AS Batch_Name from tblbatch b JOIN
tblstudent s ON s.Batch_id=b.BatchId ;

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark	Batch_Name
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97	2021-2022
2	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77	2020-2021
3	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89	2019-2020
4	4	Rahul	M	1997-06-21	rahul04@gmail.com	3	1	86	2017-2018
5	5	Akshay	M	1996-09-30	akshay56@gmail.com	2	2	84	2018-2019
6	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92	2020-2021
7	7	George	M	1998-06-16	george@gmail.com	1	3	77	2019-2020

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

```
JSELECT b.BatchName, COUNT(case when Student_Gender='M' then 1 end)
AS Total_Male,
COUNT(case when Student_Gender='F' then 1 end)As Total_Female from
tblstudent s JOIN tblbatch b ON b.BatchId=s.Batch_id GROUP BY
b.BatchName;
```

	BatchName	Total_Male	Total_Female
1	2017-2018	2	0
2	2018-2019	1	0
3	2019-2020	1	3
4	2020-2021	0	2
5	2021-2022	2	0

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

```
SELECT Student_Name FROM tblstudent WHERE Student_Mark=(select MAX(Student_Mark)from tblstudent where Course_Id=(select CourseId from tblcourse where Courseshortname='BCA'));

Student_Name

Anoopa
```

23. Select the Male MCA Student who have Minimum Mark

```
SELECT Student_Name FROM tblstudent WHERE Student_Mark=(select MIN(Student_Mark)from tblstudent where Course_Id=(select CourseId from tblcourse where Courseshortname='MCA')) and Student_Gender='M';
```

	Student_Name
1	Sarath

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

```
SELECT * FROM tblstudent WHERE Student_Mark >(select AVG(Student_Mark)from tblstudent where Course_Id IN (select CourseId from tblcourse where Coursetype='UG'))AND Course_Id IN (select CourseId from tblcourse where Coursetype='UG');
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
2	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
3	10	Ambly	F	1999-03-03	ambly29@gmail.com	7	3	90

25. Select the BCA student details who have Max Mark

```
SELECT * FROM tblstudent WHERE Student_Mark=(select MAX(Student_Mark)from tblstudent where Course_Id=(select CourseId from tblcourse where Courseshortname='BCA'));
```

	Studentid		Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
2	12	Sarath	m	1998-09-05	sarath@gmail.com	4	3	92

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

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

	Student_Name	Student_Email
1	Alan	alan01gmail.com
2	Elizbath	elizabth07gmail.com

27. Select the Dob and Current Age of All students

```
| Select Student_Name,Student_Dob,datediff(YY,Student_DOB,getdate()) | as Age | from tblstudent
```

	Student_Name	Student_Dob	Age
1	Roshan	1999-06-21	23
2	Anakha	1998-12-02	24
3	Nanthana	2000-11-24	22
4	Rahul	1997-06-21	25
5	Akshay	1996-09-30	26
6	Anoopa	2001-03-18	21
7	George	1998-06-16	24

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 tblstudent;
```

		_	
	Student_Name	Birth_Month	Year_Of_Birth
1	Roshan	June	1999
2	Anakha	December	1998
3	Nanthana	November	2000
4	Rahul	June	1997
5	Akshay	September	1996
6	Anoopa	March	2001
7	George	June	1998

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

```
| select Student_Email, Student_DOB from tblstudent where | Course_Id=(select CourseId from tblcourse where | Courseshortname='MCA') AND Student_Gender='F';
```

	Student_Email	Student_DOB
1	elizabth07gmail.com	1998-09-05

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

```
SELECT c.Courseshortname AS Course, MAX(s.Student_Mark) AS Max_Mark
FROM tblcourse c JOIN tblstudent s
ON s.Course_Id = c.CourseId GROUP BY c.Courseshortname;
```

	Course	Max_Mark
1	BAA	90
2	BCA	92
3	Bcom	84
4	BHRM	86
5	MBA	77
6	MCA	97

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

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

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	13	Anite	F	1992-09-05	anite@gmail.com	4	3	92

- 32. Select the Course short name, Batch name, total number of students in batch and Course wise
- 33. Select details of BCA Students whose year of birth between 1992 and 1996

```
| Select * from tblstudent where Course_Id=(select CourseId from tblcourse where Courseshortname='BCA') AND YEAR(Student_DOB)BETWEEN | 1992 AND 1996;
```

ı.									
		Studentid		Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
	1	14	Rony	M	1995-06-16	Rony@gmail.com	1	3	77

34. Select the details of Male PG Students

SELECT * FROM tblstudent WHERE Student_Gender='M' AND Course_Id in(select CourseId from tblcourse where Coursetype='PG');

	Studentid		Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
2	8	Alan	M	1997-07-05	alan01gmail.com	4	5	96

35. Select the details of BCA Students who have greater than average mark

FROM tblstudent WHERE Student_Mark >(select AVG(Student_Mark)from tblstudent where Course_id IN (select Course_id from tblcourse where Courseshortname='BCA'))AND Course_id IN (select Course_id from tblcourse where Courseshortname='BCA');

	Student_id	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_id	Batch_id	Student_Mark
1	1205	Ivaniya	F	2004-01-19	Diyaniya@gmail.com	100	2021	94
2	1207	ARYA	F	2002-03-12	arya78@gmail.com	100	2022	90

35. Select the details BAA – 2019-2022 Batch Students

SELECT * FROM tblstudent WHERE Course_Id=(select CourseId from tblcourse where Courseshortname='BAA')AND Batch_id=(SELECT BatchId FROM tblbatch WHERE BatchName='2019-2020');



36. Select the name of student having maximum age?

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

```
Student_Name
Anite
```

Anoopa

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

```
SELECT Student_Name,Student_Email from tblstudent WHERE
Course_Id=(select CourseId from tblcourse where
Courseshortname='BCA')
ORDER BY datediff(YY,Student_DOB,getdate()) ASC OFFSET 0 ROWS FETCH
FIRST 1 ROWS ONLY;
                    Student_Email
     Student_Name
                    anoopa03@gmail.com
```

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

```
select * from tblstudent ORDER BY Student_DOB DESC;
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
2	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
3	1	Roshan	M	1999-06-21	roshan01@gmail.com	4	5	97
4	10	Ambly	F	1999-03-03	ambly29@gmail.com	7	3	90
5	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77
6	11	Elizbath	F	1998-09-05	elizabth07gmail.com	4	3	96
7	12	Sarath	m	1998-09-05	sarath@gmail.com	4	3	92

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

```
SELECT * FROM tblstudent WHERE Student_Mark BETWEEN 65 AND 91;
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	2	Anakha	F	1998-12-02	anakha99@gmail.com	5	4	77
2	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
3	4	Rahul	M	1997-06-21	rahul04@gmail.com	3	1	86
4	5	Akshay	M	1996-09-30	akshay56@gmail.com	2	2	84
5	7	George	M	1998-06-16	george@gmail.com	1	3	77
6	9	Albin	M	1998-05-24	albin03@gmail.com	7	1	84
7	10	Ambly	F	1999-03-03	ambly29@gmail.com	7	3	90

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

```
SELECT * FROM tblstudent WHERE Course_Id=(SELECT CourseId from
tblcourse where Courseshortname='BCA') ORDER BY Student_Mark DESC;
```

	Studentid	Student_Name	Student_Gender	Student_DOB	Student_Email	Course_ld	Batch_id	Student_mark
1	6	Anoopa	F	2001-03-18	anoopa03@gmail.com	1	4	92
2	3	Nanthana	F	2000-11-24	nanthana@gmail.com	1	3	89
3	7	George	M	1998-06-16	george@gmail.com	1	3	77
4	14	Rony	M	1995-06-16	Rony@gmail.com	1	3	77