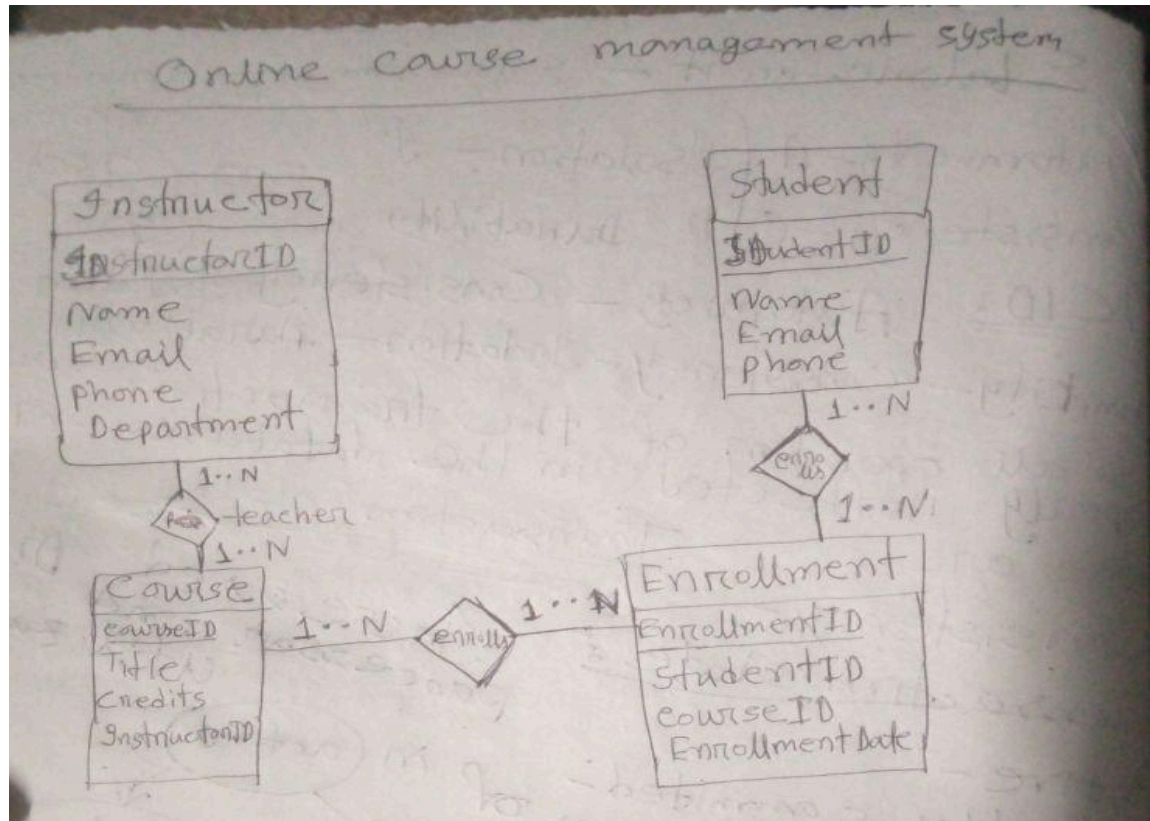1. ER Diagram (OCMSS):

2. INSERT INTO Enrollment (StudentID, CourseID, EnrollmentDate)
   VALUES (
        5,
        (SELECT CourseID
        FROM Course
        ORDER BY Credits DESC
        LIMIT 1),
        CURDATE()
   );
3. UPDATE Course
   SET InstructorID = 1
   WHERE CourseID = 3;
4. SELECT I.Name
   FROM Instructor AS I
        JOIN Course AS C ON I.InstructorID = C.InstructorID
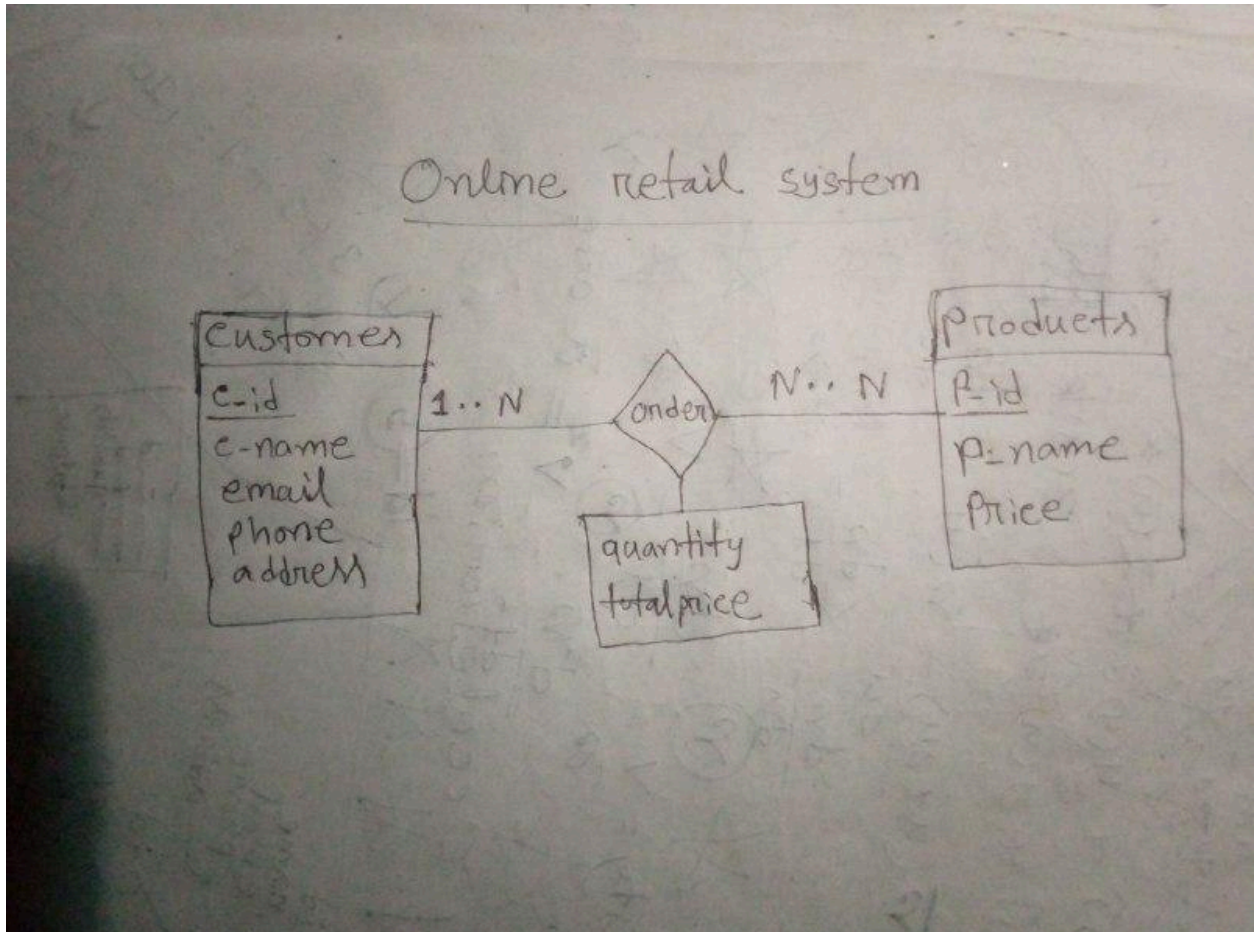   GROUP BY I.InstructorID

```
HAVING SUM(C.Credits) = (
    SELECT SUM(CREDITS) AS SM
        FROM COURSE
        GROUP BY InstructorID
        ORDER BY SM DESC
        LIMIT 1
);
```

5.
```
SELECT S.StudentID, S.Name
FROM Student S
        JOIN Enrollment E ON S.StudentID = E.StudentID
GROUP BY S.StudentID
HAVING COUNT(E.CourseID) > 2;
```

6.

7. GROUP BY using Group function while ORDER BY is a sorting system (there are two types: ASC (ascending) and DESC (descending)).
   EX. Group By:
   ```
   SELECT INSTRUCTORID
   FROM COURSE
   GROUP BY INSTRUCTORID;
   ```
   EX. Order By:
   ```
   SELECT *
   FROM student
   ORDER BY name;
   ```
8. ```
   SELECT MAX(SALARY)
   FROM INSTRUCTOR
   WHERE SALARY < (
       SELECT MAX(SALARY)
       FROM INSTRUCTOR
   );
   ```
9. ```
   CREATE TABLE COURSE
   (
       C_ID CHAR(6) PRIMARY KEY,
       C_TITLE VARCHAR(60),
       FOREIGN KEY(C_ID) REFERENCES INSTRUCTOR(I_ID)
           ON DELETE CASCADE
   );
   ```
10. এই course এর সবথেকে সমস্যা হয়েছে ERD বুঝতে , এজন্য মডিউলের video গুলো অনেকবার করে দেখেছি। এখন কিছুটা বুঝতে পেরেছি। আরো প্রাকটিস করলে আরো ক্লিয়ার হবে ইনশাআল্লাহ।