DBMS LAB – QUIZ

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SET 1.

DATA BASE Creation:

```
✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0019 seconds.)

  CREATE TABLE STUDENT_385 ( Name varchar(30) not null, StudentNumber int not null, Class int not null, Major varchar(4), CONSTRAINT STUDENT_385_pk PRIMARY KEY(StudentNumber)
[ Edit inline ] [ Edit ] [ Create PHP code ]
  △ Warning: #1280 Name 'STUDENT_385_pk' ignored for PRIMARY key.

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)

  CREATE TABLE COURSE_385 ( CourseName varchar(30) not null, CourseNumber varchar(8) not null, CreditHours int not null, Department varchar(4), CONSTRAINT COURSE_385_pk PRIMARY KEY(CourseNumber) );
 [ Edit inline ] [ Edit ] [ Create PHP code ]
  △ Warning: #1280 Name 'COURSE_385_pk' ignored for PRIMARY key.
   MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)
  CREATE TABLE SECTION_385 ( SectionIdentifier int not null, CourseNumber varchar(8) not null, Semester varchar(6) not null, Year int not null, Instructor varchar(30) not null, CONSTRAINT SECTION_385_pk PRIMARY KEY(SectionIdentifier), CONSTRAINT SECTION_385_cn_fk FOREIGN KEY(CourseNumber) REFERENCES COURSE_385(CourseNumber) ON DELETE CASCADE
  ON UPDATE CASCADE );
[Edit inline][Edit][Create PHP code]

    Warning: #1280 Name 'SECTION 385 pk' ignored for PRIMARY key.

 ■ Console
  MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)
  CREATE TABLE GRADE_REPORT_385 ( StudentNumber int not null, SectionIdentifier int not null, Grade char(1), CONSTRAINT GRADE_REPORT_385_pk PRIMARY

KEY(StudentNumber, SectionIdentifier), CONSTRAINT GRADE_REPORT_385_sn_fk FOREIGN KEY(StudentNumber) REFERENCES STUDENT_385(StudentNumber) ON DELETE CASCADE ON UPDATE CASCADE,

CONSTRAINT GRADE_REPORT_385_si_fk FOREIGN KEY(SectionIdentifier) REFERENCES SECTION_385(SectionIdentifier) ON DELETE CASCADE ON UPDATE CASCADE );
 [ Edit inline ] [ Edit ] [ Create PHP code ]
  △ Warning: #1280 Name 'GRADE_REPORT_385_pk' ignored for PRIMARY key.
  CREATE TABLE PREREQUISITE_385 ( CourseNumber varchar(8) not null, PrerequisiteNumber varchar(8) not null, CONSTRAINT PREREQUISITE_pk PRIMARY

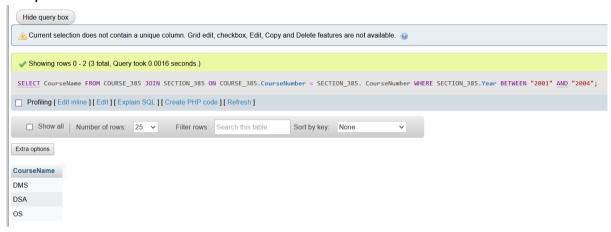
KEY(CourseNumber, PrerequisiteNumber), CONSTRAINT PREREQUISITE_385_cn_fk FOREIGN KEY(CourseNumber) REFERENCES COURSE_385(CourseNumber) ON DELETE CASCADE ON UPDATE CASCADE

CONSTRAINT PREREQUISITE_385_pn_fk FOREIGN KEY(PrerequisiteNumber) REFERENCES COURSE_385(CourseNumber) ON DELETE CASCADE ON UPDATE CASCADE );
[ Edit inline ] [ Edit ] [ Create PHP code ]
  △ Warning: #1280 Name 'PREREQUISITE_pk' ignored for PRIMARY key.
  3 rows inserted. (Query took 0.0007 seconds.)
  INSERT into STUDENT_385 values ('Madhavan',154,3,'CS'), ('Ram',15,4,'CS'), ('Akash',17,4,'CS');
[ Edit inline ] [ Edit ] [ Create PHP code ]
  INSERT into COURSE_385 values ('DSA','16CS237',4,'CS'), ('DBMS','16CS154',4,'CS'), ('DMS','16CS243',3,'CS'), ('OS','16CS180',3,'CS');
[ Edit inline ] [ Edit ] [ Create PHP code ]
  <u>INSERT</u> into SECTION_385 <u>values</u> (1,'16CS243','3',2001,'Prof1'), (2,'16CS237','3',2003,'Prof2'), (3,'16CS154','5',2005,'Prof3'), (4,'16CS243','3',2006,'Prof4'),
  (5,'16CS237','3',2019,'Prof2'), (6,'16CS180','3',2004,'Prof5');
[Edit inline][Edit][Create PHP code]
  <u>INSERT</u> into GRADE_REPORT_385 <u>values</u> (154,4,'C'), (154,5,'B'), (15,1,'A'), (15,2,'A'), (15,3,'A'), (15,6,'A'), (17,4,'C'), (17,5,'B');
[Edit inline][Edit][Create PHP code]
  3 rows inserted (Query took 0 0003 seconds)
 INSERT into PREREQUISITE_385 values ('16CS180','16CS154'), ('16CS180','16CS243'), ('16CS154','16CS237');
[Edit inline][Edit][Create PHP code]
```

1. Query:

```
SELECT CourseName FROM COURSE_385 JOIN SECTION_385 ON
COURSE_385.CourseNumber = SECTION_385.CourseNumber WHERE
SECTION_385.Year BETWEEN "2001" AND "2004";
```

Output:



2. Query:

```
create table Student_Report_385 as select StudentNumber, CourseNumber,
case
when Grade = 'A' then 100
when Grade = 'B' then 90
when Grade = 'C' then 80
end as Marks
from grade_report_385 natural join section_385 natural join COURSE_385
```

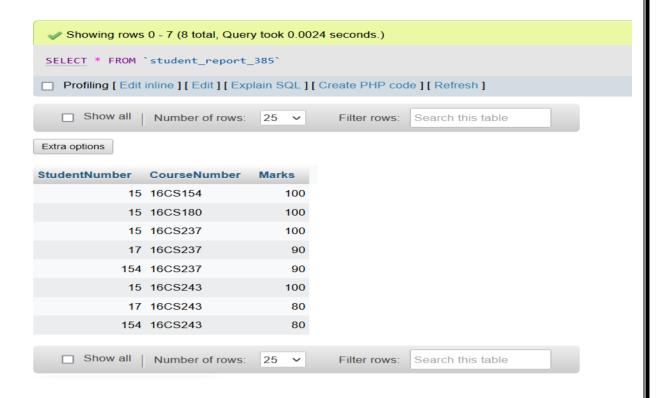
Output:

```
Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0003 seconds.)

CREATE TABLE Student_Report_385( StudentNumber int not null, CourseNumber varchar(8) not null, Marks INT(5) );

[Edit inline][Edit][Create PHP code]
```



3. Query:

```
create table student_statistics_385(
totalmarks int not null,
avgmarks int not null
);

delimiter //
create trigger save_current_total_avg
after insert
on Student_Report_385 for each row
begin
    insert into student_statistics_385(totalmarks, avgmarks)
    select sum(marks), (sum(marks) / count(*))
    from Student_Report_385;
end//
delimiter;
```

Output:

```
Show query box

**MySQL returned an empty result set (i.e. zero rows). (Query took 0.0051 seconds.)

**Create trigger save_current_total_avg after insert on Student_Report_385 for each row begin insert into student_statistics_385(totalmarks, avgmarks) select sum(marks), (sum(marks) / count(*)) from Student_Report_385; end;

[Edit inline] [Edit] [Create PHP code]
```