Assignment-2 CS303

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1 Problem 1

Suppose that we have a relation marks(ID, score) and we wish to assign grades to students based on the score as follows: grade F if score ¡ 40,grade C if $40 \leq$ score < 60, grade B if $60 \leq$ score ¡ 80, and grade A if $80 \leq$ score. Write SQL queries to do the following:

1.1 Part (a)

Display the grade for each student, based on the marks relation.

```
1   select ID, score,
2     case
3         when score>=80 then 'A'
4         when score>=60 then 'B'
5         when score>=40 then 'C'
6         else 'F'
7     end as grade
8   from marks
```

1.2 Part (b)

Display the grade for each student, based on the marks relation.

```
1   select case
2         when score>=80 then 'A'
3         when score>=60 then 'B'
4         when score>=40 then 'C'
5         else 'F'
6     end as grade, count(*) as grade_count
7   from marks
8   group by grade
```

2 Problem 2

Using tables given in the question, write SQL queries for the following:

2.1 Part (a)

Give all employees of "First Bank Corporation" a 10 percent raise.

```
1  update works
2  set salary = salary*1.1
3  where company_name='First Bank Corporation'
```

2.2 Part (b)

Give all managers of "First Bank Corporation" a 10 percent raise.

```
1  update works
2  set salary = salary*1.1
3  where employee_name in
4      (select distinct M.manager_name
5      from works as W inner join manages as M
6      on W.employee_name=M.manager_name
7      where W.company_name='First Bank Corporation')
```

2.3 Part (c)

Delete all tuples in the works relation for employees of "Small Bank Corporation".

```
1  delete from works
2  where company_name='Small Bank Corporation'
```

2.4 Part (d)

Delete all tuples in the works relation for employees of "Small Bank Corporation".

```
1  delete from works
2  where company_name='Small Bank Corporation'
```