CS-303 - Assignment 2

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Answer 1

(a).

alter table marks add grade varchar(5);
update marks
set grade = "A" where score >= 80;
update marks
set grade = "B" where score >= 60 and score < 80;
update marks
set grade = "C" where score >= 40 and score < 60;
update marks
set grade = "F" where score < 40;
select* from marks;

(b).

select grade, count(ID)
from marks group by grade;

Answer 2

(a).

update works
set salary = salary*1.10
where company_name = "First Bank Corporation";

(b).

update works
set salary = salary*1.10
where company_name = "First Bank Corporation"
and employee_name in (select manager_name from manages);

(c).

delete from works
where company_name = "Small Bank Corporation";

(d).

select employee_name
from employee natural join works natural join company;

(e).

select e.employee_name
from employee as e,employee as m, manages as r
where e.employee_name=r.employee_name
and m.employee_name=r.manager_name
and e.city=m.city
and e.street=m.street;

(f).

create view com_avg_sal as
select company_name, avg(salary) as avg_salary
from works group by company_name;
select employee_name from employee natural join com_avg_sal
where salary > avg_salary;

(g).

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select company_name from works
where salary in (select min(salary) from works);
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(h).

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create view comp_emp as
select company_name, count(employee_name) as employee_name
from works group by company_name;
select company_name from comp_emp where employee_name in (select
max(employee_name) from comp_emp);
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(i).

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select company_name
from works group by company_name
having avg(salary) > (select avg(salary) from works
where company_name = "First Bank Corporation");
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(j).

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update employee
set city = "Newtown"
where employee_name = "Jones";
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(k).

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update works
set salary = case
when salary <= 100000 then salary*1.10
else salary*1.03
end
where company_name = "First Bank Corporation";
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Answer 3

select username, training_date
from users natural join training_details
group by username, training_date having count(*) > 1
order by training_date desc;

Answer 4

Here by the sub-query(*select * winner_id from races*) we will get those ids of runners who won the race(including the NULL value). So the meaning of the whole query is to get the details of the runners who didn't win any race.

If we execute the query then we will get an empty set as output since by sub-query we are getting the NULL value and while comparing the id with NULL value we will get result as False.

Answer 5

(a).

*select * from books left outer join publishers*
on books.publisher_id = publishers.publisher_id;

(b).

*select * from books right outer join publishers*
on books.publisher_id = publishers.publisher_id;