PART-1

```
create table PUBLISHER
(NAME varchar2(20) PRIMARY KEY,
ADDRESS varchar2(40),
PHONE number(10));

create table BOOK
(BOOK_ID varchar2(20) PRIMARY KEY,
TITLE varchar2(20),
PUBLISHER_NAME varchar2(20) REFERENCES PUBLISHER(NAME)
ON DELETE CASCADE);

create table BOOK_AUTHORS
(BOOK_ID varchar2(20) REFERENCES BOOK(BOOK_ID) ON DELETE
CASCADE,
AUTHOR_NAME varchar2(20),
PRIMARY KEY(BOOK_ID,AUTHOR_NAME));

create table LIBRARY_BRANCH
(BRANCH_ID varchar2(20) PRIMARY KEY,
BRANCH_NAME varchar2(20),
ADDRESS varchar2(20));

create table BORROWER
(CARD_NO varchar2(20) PRIMARY KEY,
NAME varchar2(20),
ADDRESS varchar2(40),
PHONE number(10));

create table BOOK_COPIES
(BOOK_ID varchar2(20) REFERENCES BOOK(BOOK_ID) ON DELETE
CASCADE,
BRANCH_ID varchar2(20) REFERENCES
LIBRARY_BRANCH(BRANCH_ID) ON DELETE CASCADE,
NO_COPIES number(4),
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PRIMARY KEY (BOOK_ID,BRANCH_ID));

create table BOOK_LOANS
(BOOK_ID varchar2(20) REFERENCES BOOK(BOOK_ID) ON DELETE
CASCADE,
BRANCH_ID varchar2(20) REFERENCES
LIBRARY_BRANCH(BRANCH_ID) ON DELETE CASCADE,
CARD_NO REFERENCES BORROWER(CARD_NO),
DATE_OUT DATE,
DUE_DATE date
PRIMARY KEY(BOOK_ID,BRANCH_ID,CARD_NO));
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PART-2

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1a) select dname, count(*) from employee,department
      where employee.dno = department.dno
      group by dname having avg(salary)>30000;

1b) select dname, count(*) from employee,department
    where employee.dno = department.dno and employee.gender = 'M' and
employee.dno in (select employee.dno from employee group by dno
having avg(salary)>30000) group by dname;

1c) select e.fname,e.minit,e.lname from employee e
    where e.dno = (select s.dno from employee s where s.salary = (select
max(salary) from employee));

1d) select fname, minit, lname from employee
      where salary>=10000 + (select min(salary) from employee);

1e) select e.fname,e.lname,e.dno from employee e where exists(
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select min(salary),s.dno from employee s group by dno having e.salary=min(salary) and e.dno=s.dno)
and
exists(select count(*) from dependent where ssn=essn group by essn having count(*)>1);

2a) create view view1_mgr_dept as select d.dname, e.fname, e.salary from employee e, department d
where e.ssn = d.mgrssn ;

2b) create view view2_mgr_dept_proj as select d.dname, e.fname,
(select count(*) from project p where p.dno = e.dno) as no_proj,
(select count(*) from employee e1 where e1.dno=d.dno) as no_emp
from employee e, department d where d.mgrssn = e.ssn;

2c) create view view3_emp_proj as select p.pname, d.dname,
(select count(ssn) from works_on w where w.pno = p.pno) as no_emp,
(select sum(hours) from works_on w where w.pno = pno) as no_hours
from project p, department d where d.dno = p.dno;

2d) create view view4_emp_proj_dept as select p.pname, d.dname,
(select count(*) from works_on w where w.pno = p.pno group by d.dno having count(*)>1) as no_emp,
(select sum(hours) from works_on w1 where w1.pno = p.pno group by w1.pno) as no_hours
from project p, department d where p.dno = d.dno;

2e) create view view5_empinfo as
select e.fname, e.salary, d.dname,
(select e1.fname from employee e1 where e1.ssn = d.mgrssn) as mgr_name,
(select e2.salary from employee e2 where e2.ssn = d.mgrssn) as mgr_salary,
(select avg(salary) from employee e3 where e3.dno = d.dno) as avg_salary
from employee e, department d
where e.dno = d.dno;
```