Consider the following relational schema and briefly answer the following questions:

Emp(eid:integer, ename:string, age:integer, salary:real)
Works(eid:integer, did:integer, pcttime:integer)
Dept(did:integer, budget:real, managerid:integer)

1) For each department, print the department id, budget, and the average salary of employees who are working there for at least 40 percent of their time.

Select d.did, d.budget, avg(e.salary)
from Emp e, Dept d, Works w
where e.eid=w.eid and w.did=d.did and w.pcttime>=40
group by d.did, d.budget;

2) Print employees age and average salary based on their age, only if there are at least 4 employees who have that age.

select e.age, avg(e.salary)
from Emp e
group by e.age having count(*)>=4;

3) Define a row-level trigger to ensure that no update can reduce an employee’s age.

delimiter //
CREATE TRIGGER NoLowerAge BEFORE UPDATE ON Emp
FOR EACH ROW
BEGIN
IF NEW.age < OLD.age THEN
SET NEW.age = OLD.age;
END IF;
END; //
delimiter;

4) Create a view named “emp_info” that shows the name and salary of employees who are working in a department with a budget more than $100,000.

create view emp_info as
select distinct e1.ename, e1.salary from Emp e1, Works w1, Dept d1
where e1.eid = w1.eid and w1.did = d1.did and d1.budget > 100000;