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Q1.

Part 1
```
select name_ from class where room = 'R128' or
    name_ in ( select cname from enrolled group by cname having count(snum) >= 5);
```

Part 2
```
select fname from faculty
join class on class.fid = faculty.fid
join enrolled on class.name_ = enrolled.cname
group by fname having count(snum) < 5;
```

Part 3
```
select age,count(level_) from student group by age;
```

Q2 declare
```
empname employee.FIRST_NAME%TYPE;
emplname employee.LAST_NAME%TYPE;
-- CURSOR c1 is select FIRST_NAME,LAST_NAME from employee;
begin
delete from employee where employee_id=2;
if (sql%FOUND) then
    dbms_output.put_line('Deleted');
else
    dbms_output.put_line('Not found');
end if;
end;
/
```

Q3.

```
CREATE TABLE DEPARTMENTS(
    department_id INTEGER,
    department_name VARCHAR2(25),
    manager_id INTEGER,
    location_id INTEGER
);

CREATE TABLE EMPLOYEES(
    employee_id INTEGER,
    first_name VARCHAR2(25),
    last_name VARCHAR2(25),
    salary INTEGER,
```

```
    manager_id INTEGER,
    department_id INTEGER
);

-- Insert random data into tables
INSERT INTO DEPARTMENTS VALUES(1, 'ECE', 1, 1);
INSERT INTO DEPARTMENTS VALUES(2, 'IT', 2, 2);
INSERT INTO DEPARTMENTS VALUES(3, 'MBA', 3, 3);
INSERT INTO DEPARTMENTS VALUES(4, 'BIOTECH',4, 4);
\


DECLARE
    max_sal INTEGER;
    dep_name VARCHAR2(25);
    emp_name VARCHAR2(25);
BEGIN
    FOR max_sal, dep_name IN (SELECT MAX(salary), department_name FROM EMPLOYEES,
DEPARTMENTS WHERE EMPLOYEES.department_id = DEPARTMENTS.department_id GROUP
BY department_name) LOOP
        SELECT first_name INTO emp_name FROM EMPLOYEES WHERE salary = max_sal;
        DBMS_OUTPUT.PUT_LINE('Department Name: ' || dep_name || ' Costliest Employee: ' ||
emp_name);
    END LOOP;
END;


declare
    dep_name departments.department_name%type;
        firstn employee.first_name%type;
        cursor c1 is (select department_name, first_name
    from  departments, employee
    where salary=(select max(salary) from employee group by department_id ));

begin
    open c1;
if c1%ISOPEN then
    dbms_output.put_line('Name of Department       First Name');
        dbms_output.put_line('_____');
    loop
        fetch c1 into dep_name,firstn;
        exit when c1%NOTFOUND;
            dbms_output.put_line(dep_name || ' ' || firstn);
            end loop;
close c1;
end if;
end;
/
```