```sql
-- Create the employee table
-- Create the department table
CREATE TABLE department (
    departmentid INT PRIMARY KEY,
    departmentname VARCHAR(50)
);


-- Insert sample values into the department table
INSERT INTO department (departmentid, departmentname)
VALUES (1, 'Sales');


INSERT INTO department (departmentid, departmentname)
VALUES (2, 'Marketing');


INSERT INTO department (departmentid, departmentname)
VALUES (3, 'Finance');


INSERT INTO department (departmentid, departmentname)
VALUES (4, 'IT');


-- Create the employee table
CREATE TABLE employee (
    employid INT PRIMARY KEY,
    ename VARCHAR(50),
    salary DECIMAL(10, 2),
    departmentid INT,
    FOREIGN KEY (departmentid) REFERENCES department(departmentid)
);


-- Insert sample values into the employee table
```

```sql
INSERT INTO employee (employid, ename, salary, departmentid)
VALUES (1, 'John Doe', 5000.00, 1);


INSERT INTO employee (employid, ename, salary, departmentid)
VALUES (2, 'Jane Smith', 6000.00, 2);


INSERT INTO employee (employid, ename, salary, departmentid)
VALUES (3, 'Michael Johnson', 5500.00, 3);


INSERT INTO employee (employid, ename, salary, departmentid)
VALUES (4, 'Emily Davis', 4500.00, 1);


INSERT INTO employee (employid, ename, salary, departmentid)
VALUES (5, 'David Lee', 4000.00, 4);


select * from employee;
select * from department;




--SOLUTIONS

--avg sal
select count(employid) from employee e1
where e1.salary>(select avg(e2.salary) from employee e2 where e2.departmentid=e1.departmentid)


   --4th highest
select e.salary from employee e
where 3=(select count( distinct e1.salary) from employee e1 where e1.salary>e.salary)


   --unique rows
```

```sql
select min(rowid),ename from employee group by employid,ename,salary,departmentid


    --duplicate rows
select employid,ename,salary,departmentid from employee
where rowid not in (select min(rowid) from employee group by
employid,ename,salary,departmentid )


--alternate
select ename from employee e
where rowid > (select min(rowid) from employee e2
    where e.employid=e2.employid and e.ename=e2.ename and e.salary=e2.salary and
e.departmentid=e2.departmentid )


    --4th highest alternative method
select salary
from (
    select salary,rownum as rn
    from(
    select distinct salary
    from employee
    order by salary desc
    )
)where rn=4
```