

Identify primary keys and foreign keys for following database. Create tables and execute queries for given statements.

```
employee(eid, ename, salary)
assignment(projectid,eid)
project(projectid,project_name,manager)
manager(eid,ename)
```

Write queries for the following questions:

1. Modify eid to use auto_increment
2. Display Employees working in both projects 'Bank Management' and 'Content Management'.
3. Display average salary of organization.
4. Display employees who do not work on 'Bank Management' Project.
5. Delete employee whose id is 5.
6. Display employee having highest salary in organization.

```
CREATE TABLE employee (
    eid INT AUTO_INCREMENT PRIMARY KEY,
    ename VARCHAR(50),
    salary INT
);
```

```
CREATE TABLE manager (
    eid INT PRIMARY KEY,
    ename VARCHAR(50)
);
```

```
CREATE TABLE project (
    projectid INT PRIMARY KEY,
    project_name VARCHAR(100),
    manager INT,
    FOREIGN KEY (manager) REFERENCES manager(eid)
);
```

```
CREATE TABLE assignment (
    projectid INT,
    eid INT,
    FOREIGN KEY (projectid) REFERENCES project(projectid),
    FOREIGN KEY (eid) REFERENCES employee(eid)
);
```

```
INSERT INTO manager (eid, ename) VALUES
(101, 'Mr. Sharma'),
(102, 'Ms. Rani');
```

```
INSERT INTO project (projectid, project_name, manager) VALUES
(201, 'Bank Management', 101),
(202, 'Content Management', 102),
```

```

(203, 'E-commerce System', 101);

-- AUTO_INCREMENT will generate eid automatically
INSERT INTO employee (ename, salary) VALUES
('Alice', 45000),
('Bob', 39000),
('Charlie', 51000),
('David', 40000),
('Eva', 60000);

-- Alice (eid = 1) works on both Bank Management and Content Management
INSERT INTO assignment (projectid, eid) VALUES
(201, 1),
(202, 1),

-- Bob works only on Bank Management
(201, 2),

-- Charlie works only on Content Management
(202, 3),

-- David works only on E-commerce System
(203, 4),

-- Eva works on all three projects
(201, 5),
(202, 5),
(203, 5);

-- 1. Modify eid to use AUTO_INCREMENT
ALTER TABLE employee MODIFY eid INT AUTO_INCREMENT;

-- 2. Display employees working in both 'Bank Management' and 'Content Management'
SELECT e.ename
FROM employee e
JOIN assignment a ON e.eid = a.eid
JOIN project p ON a.projectid = p.projectid
WHERE p.project_name IN ('Bank Management', 'Content Management')
GROUP BY e.eid, e.ename
HAVING COUNT(DISTINCT p.project_name) = 2;

-- 3. Display average salary of organization
SELECT AVG(salary) AS avg_salary
FROM employee;

-- 4. Display employees who do not work on 'Bank Management' Project
SELECT e.name
FROM employee e
WHERE e.eid NOT IN (
    SELECT a.eid

```

```
FROM assignment a
JOIN project p ON a.projectid = p.projectid
WHERE p.project_name = 'Bank Management'
);
```

```
-- 5. Delete employee whose id is 5
DELETE FROM employee
WHERE eid = 5;
```

```
-- 6. Display employee having highest salary in organization
SELECT ename, salary
FROM employee
WHERE salary = (SELECT MAX(salary) FROM employee);
```