Query 1: Retrieve all employees who work for the 'Research' department.

```
SELECT FNAME, LNAME
FROM (EMPLOYEE JOIN DEPARTMENT ON DNO = DNUMBER)
WHERE DNAME = 'RESEARCH';
```

Query 2: For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birthdate.

```
SELECT      PNUMBER, DNUM, LNAME, BDATE, ADDRESS
FROM        PROJECT, DEPARTMENT, EMPLOYEE
WHERE       DNUM=DNUMBER AND MGRSSN=SSN
            AND PLOCATION='Stafford'
```

Query 3: Find the names of employees who work on all the projects controlled by department 5.

```
SELECT      FNAME, LNAME    FROM        EMPLOYEE
            WHERE  (    (SELECT    PNO    FROM             WORKS_ON
                        WHERE      SSN=ESSN)  CONTAINS
                        (SELECT    PNUMBER
                        FROM       PROJECT        WHERE    DNUM=5) )
```

Query 4: Make a list of project numbers for the projects that involve an employee whose last name is 'Smith', either as a worker or as a manager of the department that controls the project.

```
(SELECT     PNAME       FROM         PROJECT, DEPARTMENT, EMPLOYEE
            WHERE        DNUM=DNUMBER AND   MGRSSN=SSN AND LNAME='Smith')
UNION
(SELECT     PNAME       FROM         PROJECT, WORKS_ON, EMPLOYEE
            WHERE        PNUMBER=PNO AND      ESSN=SSN AND NAME='Smith')
```

Query 5: List the names of all employees with two or more projects.

```
SELECT FNAME, LNAME
FROM EMPLOYEE  E, WORKS_ON  W
WHERE E.SSN = W.ESSN
GROUP BY E.SSN
HAVING COUNT(W.PNO) >= 2;
```

Query 6: Retrieve the names of employees who have no dependents.

```
SELECT SSN FROM EMPLOYEE
MINUS
SELECT ESSN FROM DEPENDENT;
```

Query 7: List the names of managers who have at least one dependent.

```
SELECT MGRSSN
FROM DEPARTMENT  D1,  DEPENDENT  D2
WHERE D1.MGRSSN = D2.ESSN;
```